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Tough politicking and a certain amount of humour: we examine the issues as they developed from race track to "dorm". We also have an interview with Niki Lauda, ringleader of the revolt against the authorities.
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GREAT EXPECTATIONS

With the arguing over, there was lots to look forward to at Kyalami. For a while, though, it looked as though the anticipated turbocar walkover might crumble: we examine how Renault driver Alain Prost snatched triumph out of near-defeat, and how Carlos Reutemann took six points which he didn't expect.

N°44 (ARGENTINA) WILL BE ON SALE ON MARCH 11th 1982

Grand Prix international

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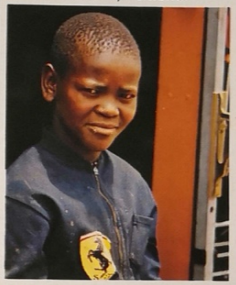
POSTCARD FROM SOUTH AFRICA

The Kyalami sunshine brought out the girls. And yes, we had our cameras in position...



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Who else but FOCA's Bernard Ecclestone to kick off our new series of interviews with leading personalities from the teams?
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It looks superb and it seems to be quick already. Giorgio Piola describes how an Englishman's influence at Ferrari could turn around Maranello's woeful reputation in the handling department and gives technical details of the Brabam BT 49.

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MORE?

With F 1 becoming more and more technical, the role of the driver seems to have become secondary to that of the engineer. As our study shows, however, you've still got to have ability to be a winner.
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YOUR GUIDE TO THE NEXT GP

Another all-new feature for 1982: our guide to the next circuit on the F 1 schedule. In this issue we look at Buenos Aires'Autodromo Municipal. Keep it handy when you switch on to the TV transmission...
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NIKI'S ROAD TO

FITNESS

If, as has been suggested, Niki Lauda is more interested in his rumoured 3-million dollar fee than driving F 1 cars again, he's putting himself through a lot of physical discomfort just to get to the bank. Heinz Prüller has followed Niki's gruelling training programme at home in Austria.

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THE GRAND PRIX IN PICTURES

When the World Champion left the road, guess who had a photographer there! Yes, we kick off a bumper picture section from Kyalami with the greatest, most colourful action racing and pitlane shots you'll see anywhere.
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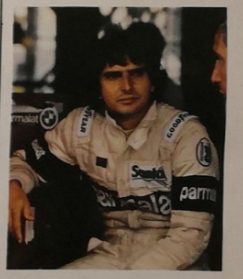
NELSON'S COLUMN

Yet another "scoop" from GPI: we've signed up world champion Nelson Piquet to report for us after every championship race in 1982. As you'll find, he's not at all depressed with such a short South African GP for his new Brabham turbocar.



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The paddock in Kyalami

RACE FAN LEO SAYER

The latest show business personality to get a close-up look at F1 is British singer Leo Sayer, the talented Londoner with curly hair and a high-pitched voice.
Leo, who was entertaining huge crowds of South Africans at Sun City in the semi-independent African kingdom of Bophutatswana, asked what one mechanic described as "some very intelligent questions" about the F1 cars.
On a day when there was little to be seen of the so-called racing stars, it was welcome to have him in pit-lane.

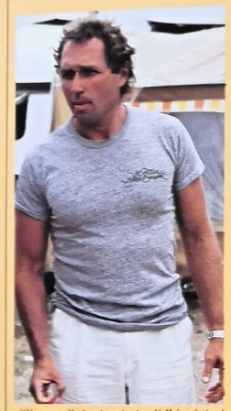
TAMBAY QUITS F1

The driver's dispute was the final straw for Patrick Tambay after last year's political struggle and the technical developments which have brought suspension-less cars to Formula 1. As his fellow-drivers prepared to start practice one day late, Patrick quietly informed his team manager Jack Oliver that he didn't want to drive and that he planned to retire immediately from F1 racing.

Patrick had been enlisted by the Arrows teams as a replacement for the injured Marc Surer. Team boss Jack Oliver had originally enlisted Brian Henton, but Tambay was preferred by Italian sponsor Ceramica Ragno. Henton — who was present at Kyalami as a guest of the team — took over the new A4 (its third driver in less than a week) but was too unfamiliar to the car to be able to qualify it in such a short period.
"I'm really pissed off with F1," admitted Tambay, who had interrupted a family holiday in Hawaii where his wife Dana is presently expecting their first child, in order to accept the Arrows offer.
"The cars are so stiffly sprung that they're liable to fly off the road even on the straights," says Patrick. "Even if drivers don't get hurt in accidents, they're all going to have spinal trouble in future."
For the third time in the cool Frenchman's career he will be looking to American racing. "I shall be driving for Team VDS with their own Can-Am car, which is being developed at Jim Hall's facility in Texas. I also expect to be racing some kind of an Indy car in the CART series."

MASS(IVE) BRUISES FOR SAGE

Renault Sport's team manager Jean Sage had a lucky escape from serious injury as practice started on Friday at Kyalami. Standing in the narrow pitlane, he was bowled over by Jochen Mass's black March as Jochen swerved to avoid a mechanic who stepped into his path without warning.



"It wasn't Jochen's fault," insisted the popular Sage as he nursed four stitches in his head and a strained leg. "In fact, if he hadn't been so quick witted I think he would have driven straight over my skull."
Mass was "guesting" for the March team at Kyalami subject to finding a major sponsor. He last competed regularly in F1 two years ago in the Arrows team.

SURER: OUT FOR THREE MONTHS

Back in a Zurich hospital when the South African GP was flagged off was Marc Surer, who injured his feet in a nasty accident during pre-race tests a week earlier.
Surer's brand new Arrows A4 swerved off the road without warning under braking: Didier Pironi, who was following, said that it looked as though something had failed on the car. Pironi was one of several drivers who helped to extritate Marc from the chassis, which had serious front end damage.
It is only two years since Surer crashed his ATS at Kyalami during the South African GP. His injuries on that occasion mainly involved his ankles, which do not appear to have suffered in this latest accident. Alan Rees, manager of the Arrows team, says that it could again be as long as three months before Marc is able to race again. "This time we think it is his heels which have been broken, and they take a long time to heal".
Marc made a miraculously quick recovery from his injuries in 1980. We send him our best wishes for a quick return to health and his new team.

MORE NEW CARS

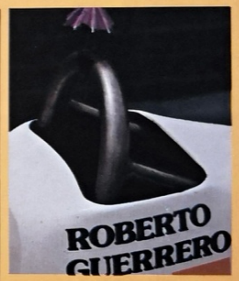
Officials of ACA, the club which organises the Argentine GP, were meeting Bernie Ecclestone at Kyalami to discuss a number of matters which include an 18 per cent increase in the 1.2 million dollar fee for their race.
We understand that the Argentine government, hard pressed by severe economic problems, is reluctant to subsidise the event as usual. However, Carlos Reutemann's second place in South Africa should ensure a capacity crowd of home fans, and there will be a brand new four-wheel Williams FW08 for him to race.

"The six-wheeler is a long-term project," Frank Williams still insists. "Our hopes rest on the FW08, which is a fairly conventional chassis. Patrick Head has done a terrific job to keep it as small and light as possible: it makes me feel very confident when I look at how well we went at Kyalami."
Other teams planning to have new chassis in Buenos Aires include Alfa Romeo, Lotus, Theodore and Ensign: all of them will incorporate carbon fibre in one form or another.

FIRED - BEFORE HIS FIRST RACE !

Ensign's Mo Nunn, as stern a disciplinarian as fellow British team owners, was so disgusted by the drivers's action that he had more or less decided to put his new driver Roberto Guerrero on suspension even before practice started at Kyalami.

So when Guerrero appeared in to start practising on Friday morning, he was shocked to find his car being packed up. "I don't believe he was in a fit mental state to drive," said Nunn, whose team is financed this year with cash from Guerrero's two Colombian sponsors.
The incident could not have come at a less opportune moment for Nunn, whose drivers have included Chris Amon, Clay Regazzoni, Jacky



Ickx and Nelson Piquet. In early testing, Nunn had been full of praise for Guerrero: "he's going to be a very fine driver," said Nunn, "and it's a pleasure to work with him."
Nunn wasn't the only car owner worried about his driver's physical condition after a night sleeping "rough". Bernie Ecclestone in his capacity as owner of the Brabham team sent Nelson Piquet to the Kyalami medical authorities to have him examined before he was allowed to practise. "He looks as though he hasn't had any sleep at all," said an angry Ecclestone.

JEFF JOINS GPI

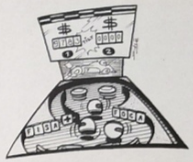
Grand Prix International is delighted to add Jeff Hutchinson to its team with effect from this issue. One of the best known and most widely travelled correspondents in motorsport, british-born Jeff, 34, and also a keen aviator, flies himself to many GPs in his twin Comanche aircraft. He takes over editorial responsibilities from founding editor Eric Bhat, who has taken up a new position in charge of PR at Renault Sport.

THE SIEGE OF SUNNYSIDE PARK

Didier Pironi earned full marks as a diplomat during the FISA-Drivers dispute giving out information to the Press and putting the drivers demands forward to the Stevards during the endless discussions that took place during Thursday when Kyalami remained silent.

Jochen Mass was the only driver to be seen at the track on Thursday when he arrived at the circuit with his wife and son, unaware of the coach trip tha had been planned for him (left). Nelson Piquet found his race practice cut even shorter on Friday when Bernie Ecclestone refused to let him out in the untimed session claiming that he was «Too tired» to race (center). A lockout of Press and team managers at a Johannesburg hotel strengthened the drivers solidarity.

Despite their makeshift sleeping accomodations on the floor of one of the hotels conference rooms, the morale amongst the 30 drivers present was at it highest. Some of them, two and three to a bed, made the most of it while their wives and girlfriends dined alone back at the Kyalami Ranch.



A distinct lack of communication on all sides — particularly as far as the Press was concerned — meant that the only people who could fully understand what was at stake in the now-notorious dispute between the drivers and FISA were the parties themselves. A factor which many observers found significant, however, was the spirit of close co-operation which appeared to exist between FISA's Balestre and FOCA's Ecclestone. It was a state of affairs which bewildered South Africans whose 1981 Grand Prix had almost become a victim of the FISA/FOCA "war."

by Mike Doodson

This year, indeed, the man who seemed to have Balestre's ear was none other than FOCA's legal adviser Max Mosley, who was threatening libel proceedings against the FISA President 12 months ago !

It was only when photocopies of the 1982 superlicence application were distributed that the issues became clear. Although 24 of the 31 drivers in the entry for Kyalami had signed their applications, they later demanded changes which had not been conceded during a seven hour meeting on the day before Thursday's official practice was due to begin.

The offending paragraphs required the following undertakings from the drivers:

- **"I am committed to the above team to drive exclusively for them in the FIA Formula One World Championship(s) until the . . . . 19. . "**
- **"I will do nothing which might harm the moral or material interests, or the image, of International Motorsport or the FIA Formula One World Championship."**

As Niki Lauda and his fellow "militants" (Pironi, Laffite and Villeneuve) had guessed, a signature to the first of these two undertakings would deny a driver any right to negotiate future contracts with any team other than the one to which he was currently committed if, for any reason, he wanted to quit that contract.

The second paragraph, badly phrased and nebulous though it might be, was tantamount to a restriction on the individual and collective freedoms of the drivers: any criticism which they might make to FISA or its officials could lead to the withdrawal or their licence. And since FISA appoints its own Appeals Tribunal, action in the civil courts would be all but impossible except as a last resort.

By Thursday morning, all the drivers but one were aware that some sort of action was planned by the ring-leaders. The exception was Jochen Mass, who had been staying with friends of his South African born wife and had not been in touch.

Previous "demos" by F1 drivers have almost inevitably collapsed as a result of pressure and legal threats brought by team managers. The same threats were issued this time at Kyalami, but for once they fell only on the ears of the Press. On this occasion, in a brilliant psychological move, a bus had been arranged to whisk everyone (except Mass) back to town, 20 miles away, where a room had been reserved in a smart hotel. Suspecting GPDA Secretary Trevor Rowe of having made these arrangements, Balestre arranged for Rowe to be ejected from the paddock on raceday by unsympathetic security guards...

For the next 24 hours the drivers stayed in their conference room: the siege of Sunnyside Park hotel was under way, and many of the drivers — some still in overalls — had no idea what was happening until they were in the bus.

Insulated from the pressure of their teams, and with a growing body of pressmen breathing heavily outside their locked door, the drivers' solidarity grew firmer by the hour. After some further discussions they despatched a serious-looking Pironi to the unexpectedly silent Kyalami circuit to make their demands known. These now centered on their being given two votes on the all-important FISA Formula 1 Commission instead of the one non-voting seat to which they are presently entitled.

Rejection of this and other demands served only to harden the drivers' attitude. By mid-afternoon, it was clear that the issues had become less important than the principle. It was equally evident that there was not going to be any practice, and FOCA anticipated possible legal action from Kyalami by lodging a 2.5 million dollar guarantee in a local bank, an impressive gesture.

Food was sent in to the drivers, and pressmen's sympathies for their cause were encouraged when free drinks appeared for the assembled hacks.

There were ten different nationalities all in the same room: as Brazilian newcomer Raul Boesel was to say later, "I may be new, but after all this I can say that I've got to know my fellow F1 drivers much faster than I ever expected."

With night falling and no break in the deadlock, the drivers quietly moved to a large room where bedding had been laid out for them on the carpet. Evidently they were going to get even more familiar with each other than they had imagined, for some of them had to share, including Villeneuve and Prost. "If that combination should ever produce offspring," joked Patrick Tambay, "it would be the quickest baby the world has ever seen."

By 9 am the following morning it was an unshaven and unrested Lauda who spoke to the Press at the Sunnyside Park to announce that the situation was unchanged. He claimed that the drivers were still "solid," but by then Teo Fabi had broken ranks and was ready to practise. Jochen Mass took his March on to the circuit for a few unofficial laps as Pironi entered yet another discussion in the circuit office of the organising club.

Soon after 10 o'clock he called Lauda and the other drivers in town to report that Balestre had agreed to negotiate the terms of the application, and within half an hour it was a haggard looking bunch of drivers who trooped in with their bags of racing gear. They got a chilly reception from their mechanics... and after Saturday's race they discovered that they hadn't even achieved the objectives which they imagined.

As someone said, you should never take "Yes" for an answer. □

SHOP STEWARD NIKI

Early on Friday morning, as Niki Lauda left the Kyalami Ranch hotel for his morning run, he suddenly realised that he was being watched by none other than Jean-Marie Balestre. Niki stopped, greeted the FISA President, and offered his hand: "thank you very much for your help," he said. Balestre ignored the hand. He looked angry, tight-lipped, sullen.

by Heinz Pruller

Later in the day, when I asked Niki if he thought the battle between the drivers and the federation was over, he told me "Yes, that's all finished." But no sooner had the last driver completed the last lap of the South African GP, with Lauda finishing 4 th just as he had done in his first "comeback" race (remember Monza '76 ?), than the drivers were informed that their licences had been "temporarily suspended" by FISA. Niki knew then that the battle had only just started.

The dispute dates back to a couple of days before Christmas. That was when the drivers received the new application form for their 1982 Superlicence from FISA (the form was dated December 18). They were instructed that the form would have to be signed before the South African GP: otherwise they would not be allowed to race. Niki already scented trouble, for this sounded like a threat. A quick phone call to Jacques Laffite, then to Didier Pironi (who was skiing in Mégève, France) rang alarm bells in their minds. "You're right," they agreed, and telegrams were immediately sent to all active F1 drivers. The message was simple: "Don't sign."

But 24 drivers had already signed. The seven who hadn't signed were Giacomelli, de Cesaris, Villeneuve, Pironi, Arnoux, Laffite and of course Lauda. "I'm prepared to sign at the very last minute," said Niki, "because I want to race. But when Teddy Mayer asked me to sign at home in early January, I refused. I told him not to worry, I said that we were prepared to race, but the superlicence business had to be changed."

Did you speak beforehand to Bernie Ecclestone ?

"Bernie told me they had been forced to do this because of what had happened with Prost when he left McLaren for Renault. He said that no major constructor should ever be able to steal a driver away from a British team again. But why should de Angelis be forced to race a Lotus when he wants do drive for Alfa Romeo ? When I saw the application form, at first I thought there was a mistake: it's wrong that FISA should try to get involved in a matter which is the private business of a driver and his team. That's not fair: it doesn't work both ways, because Teddy Mayer can throw me out if he wants to. I see a dangerous situation in future, with one person controlling the whole of Formula 1, contracts, money, the lot. It won't bother me because in two year's time I may not be racing anymore. But the young drivers will definitely suffer."

So why didn't you try to get a seat on the Formula 1 Commission ?

"We did ! There are six constructors on the Commission, including Max Mosley who doesn't even have a team or cash invested. There are also three organisers, even a couple of sponsors. Yet not a single driver has the right to vote. If I take a complaint to a normal civil court, I can expect a reasonably independent decision. But not in the FISA court, which is composed of people who have a direct, strong interest in motorsport. They are not independent, but they are allowed to decide everything. If we drivers became a part of it, that would make the Mafia complete..."

When you came here to Kyalami, all seven of the drivers who had not done so already had signed the superlicence form, including you. Why ?

"So that all the drivers were in exactly the same position, with no exceptions. We were all on the same side, not two different parties."

Looking back on previous disputes like Zolder '73, Barcelona '75, Fuji '76, even Zolder last year, this was the first time that the drivers really stuck together. Was it your splendid idea to arrange for a bus to take you away from the circuit and away from the noise and the team managers ?

"Let's say it was our idea. At the beginning, in the discussions with the Formula 1 Commission, I was just listening because Didier Pironi did all the talking. Didier was diplomatic but firm, he was polite and completely unemotional. The important thing — until Friday morning — was to keep on talking. The compromise in the licence that the drivers wanted was such an insignificant matter that we the drivers couldn't understand why it was taking such a long time to settle. The later it got, the more difficult it was for the race to take place. I couldn't understand why Mr Ecclestone and Mr Balestre wanted to risk the whole race when all they had to concede was a couple of stupid little points. They threatened to take away our licences, but the constructors seemed to be in even deeper trouble, suing each other or being sued by the circuit. It was a power struggle. FISA especially spat on us: we knew it would be difficult to get any written undertakings from them and we would probably have to be satisfied with with a verbal agreement, but until Friday morning even that was impossible to get. All we heard was that the constructors said they would get another set of drivers because it was their right to put anyone they liked in their own cars. The only difficulty would be getting the sponsors to agree. I don't think it is as easy as that: would there be an Argentine GP without Reutemann, or a Brazilian GP without Piquet ?"

What did you think when Balestre refused to talk to you and Pironi on Thursday night ?

"He represents FISA, the official body, so I can understand in a way why he didn't want to talk to us. When he said he wasn't prepared to negotiate with drivers who refused to take part in practice, that was because he wanted to support his own organisation. But you can always find a way to talk to someone... and for a long time he refused to do even that. If he wants to screw the whole of GP racing just to prove that he is the official body... well that's fair enough."

But you all wanted to race, didn't you ?

Yes, me especially. That's why I have come back. It's a long way to South Africa and we've spent a long time testing our cars: all we were asking was our minimum rights. If there had been agreement on that, then we would have been ready to practise immediately, even if it had meant forgetting pre-qualifying or having 31 cars on the track at the same time."

What was it like with 30 highly-paid racing drivers spending an entire night together in one room ?

"I would like to see all the Formula 1 constructors sleeping together in the same bed ! I was sharing a bed with Patrese, someone next to Rosberg was snoring until Villeneuve put a blanket over him in the middle of the night, but all the time we stood together and we even had some piano playing from de Angelis and Villeneuve. But we stayed together because we wanted to."

Bernie Ecclestone said that Nelson Piquet wasn't fit to practise the next day because he had to stay awake all night to make sure that none of the drivers escaped...

"Nobody was forced to stay. And when team managers complain that they were prevented from talking to their drivers, I would like to say that we were having meetings for a lot of the time, and when you're in conference it's not normal to let just anyone inside. You have your meeting, then you look at the next priority... like talking to your team manager."

Was it difficult to retain your solidarity ?

"There was only one driver who left us, Mr Fabi, who went about 30 minutes before practice. We decided that if he wanted to go he should be allowed to do so. But we didn't stay together and fight for nothing without intending to win. Mr Ecclestone and Mr Balestre confirmed that all the changes we wanted would be made. The agreement was not written down, but these are grown men, not little children, and that was good enough for us to start practice on Friday."

But Max Mosley was talking about "100 per cent defeat for the drivers..."

"Maybe some of those involved don't want to lose face. Mo Nunn said he'd fired Roberto Guerrero who was under a lot of pressure and in tears after receiving an emotional phone call from his girl friend. But in Mr Nunn's case, if he was firing Guerrero, then he was also firing his sponsor..."

NB. An official statement after the GP from the South African Automobile Association, which handles FISA affairs in the Republic, declared that the licences of 30 drivers (not including Fabi, Mass and Henton) had been temporarily suspended. The Association claimed that the race had been run under a truce, "and that the truce was now at an end." A meeting of the FISA Executive Commission was due to take place two days after this issue of GPI had gone to press: one item on the agenda was "the future of the Formula 1 world championship." This is a subject in which the organisers of the next two GPs (Argentina on March 7, Brazil on March 21) are presently taking a close interest. □

A new Harvey Postlethwaite designed chassis which featured carbon-fiber bulkheads and improved aerodynamics and suspesion made the Ferrari-turbo 126 C-2s far more competitive, but they were still let down by the unreliability of their engines. Villeneuve's blew-up early on, while Pironi's went sick just before the finish.

The Brabham team rested their hopes on the BMW-turbo engine in South Africa. Nelson Piquet showed its potential with a place on the front row in practice, but he never realised that potential after he crashed in the opening laps of the race. His team-mate Riccardo Patrese also ran well first time out in the car, but the BMW's first racing appearence ended up with a double d.n.f. when Patrese's engine lost oil and blew up before half distance.

GREAT EXPECTATIONS

After six of the seven turbocars had comfortably outclassed all the non-turbos in practice at Kyalami, most of the managers of the non-turbo teams were convinced that their only hope of picking up more than a couple of championship points would be a car-breaking battle between the much more powerful turbos. In fact only two turbos completed the race, both of them yellow Renaults, and the fact that one of them was able to win owed less to good judgment than to Alain's guardian angel

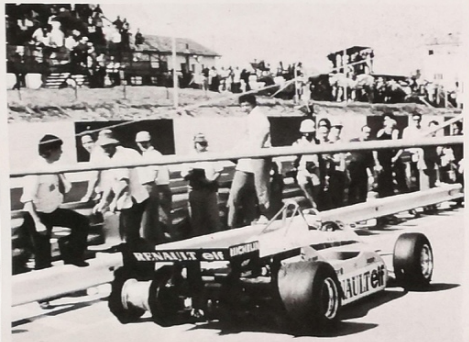
PROST SAVES THE DAY

If you are a turbo-Renault-Elf driver at a track like Kyalami, which is almost 6000-feet above sea-level, everybody expects you to win. Always fast when they are on equal terms with their regularly aspirated rivals like Lotus, Ligier, Williams, Tyrrell and Alfa-Romeo, Renault's power advantage in South Africa puts them in a different league, the "Turbo-League".

by Jeff Hutchinson

Even with the two much improved latest Ferrari 126 C2s and BMW - turbo - powered Brabham BT50s as formidable opposition, everyone was still expecting the latest RE30B chassis to take the chequered flag on Saturday afternoon.
New bodywork and much improved aerodynamics, openly admired even by their opposition, had helped Prost towards some shatteringly fast times during the previous week's private testing. Prost's best of 1 m 05.44s on Tuesday was already almost five seconds under Jean Pierre Jabouille's pole-position time with Renault two years ago.
The stage had been set for a sweeping success, but as every racing driver knows, the gods of fate can interfere with the best laid plans.
When practice finally began on Friday morning, Prost's car returned to the pit lane on the back of a truck after a rear tyre had punctured, sending him off the track and into the safety wall. The damage was limited to slightly ben rear suspension, which was replaced in time for the final hour of timed practice that began under the threat of rain.
Time became even shorter as black rain clouds threatened to halt practice at any moment, but it was not Prost who set the pace for the Renault team, it was little René, for a frustrated Prost found the power of his engine dropping off with every lap, probably as a result of some dirt being sucked into the turbo when he went off in the morning.
Before he could get properly organised into the spare chassis, the rain had started to fall. Thus Prost found himself starting the race on the third row of the grid with the two Brabhams and Villeneuve's Ferrari lined up ahead.

Renault RE30 in its new, «B» version has a lighter (by 4.5 kg) chassis, more effective aerodynamics (same downforce as with sliding skirts), revised suspension and a reliable 550 bhp (official). Weight will soon be down to the limit and there is electronic fuel injection to come later this year.



Moment of truth for Prost as he limps into the pits with a flat tyre.

A larger team and expanded management have enabled ATS to run two cars again. Despite this spin by F1 newcomer Manfred Winkelhock during tests, the noticeably smarter D6 cars ran reliably throughout the SA GP to finish 9th (Salazar) and 10th (Winkelhock).

→

Pending the arrival of a new chassis, the most important innovation at Ligier is new Talbot driver Eddie Cheever. JS17 chassis has been strengthened but Matra V12 engine is unchanged: a new turbo V6 is planned but it's still far from ready.

Not surprisingly, six turbo-powered cars has taken the first six places on the grid, Pironi bringing up the "rear" after he too had engine problems.
Arnoux's pole was only a few tenths quicker than the time set by Piquet, who felt that he could have taken pole position, but for the fact that a skirt had jammed under the side pod during his quick laps causing the car to understeer badly.

A loose side pod gave Villeneuve a similar experience with his Ferrari, while Patrese did only one lap to record his best time in his race car after the spare was troubled by a misfire and then a broken rear wing.
It was interesting to note that the turbo cars were being clocked at over 200 mph at the end of the main straight, almost 20 mph faster than their quickest Cosworth powered rivals.
Even the Toleman-Hart turbo was a strong runner here, Derek Warwick placing on the seventh row of the grid. His new team-mate Teo Fabi's luck ran out at the start of practice when he failed to quality the second Toleman because of a broken turbo-charger bearing.

Any fears that Arnoux might have had about racing side-by-side with Piquet and Patrese into the first corner at the end of the straight were soon dispelled. Arnoux streaked ahead from the start to take the lead, while Piquet, unused to getting a turbo off the line, made a slow motion start holding up Patrese also for a few moments.

Arnoux was soon joined by Prost at the head of the field and for the next 14 laps they ran around nos-to-tail, already lapping some of the slower cars in the race.
By this time they were under pressure only from Iach other. The two Ferraris behind them had been aliminated to just one on lap 7, when Villeneuve's engine blew up in a cloud of blue smoke. Piquet's enthusiasm to make up for his bad start got the better of him four laps into the race. While trying to outbrake Alboreto's Tyrrell for tenth place he locked up and got sideways, ending his race in the catch fencing.
The second Brabham of Patrese, trailing a distant fourth behind Pironi, soon also joined the retirement list when (after just 18 laps) the engine lost oil pressure forcing the Italian to park it.
Two laps earlier Prost had moved into the lead when Arnoux found himself boxed in by a slower car, leaving a fast-approachng Alain with little choice but to take advantage of the situation.
"By then I was driving under no pressure at all. I knew that if I did not have any mechanical problems the race would be an easy one for me," said Prost. But things rarely come that easily and it was time the Gods took a hand again to shake up his confidence and test his mettle.
It came on lap 41, just as he was going into the fast 180 mph left hand sweep, at the far end of the track.
"The car suddenly went sideways and I was only just able to catch it and retain control. Another few meters into the corner and I would have run out of road and had a big accident," explained Prost.
As it was, he limped his car back to the pits for almost three-quarters of a lap, arriving in pit lane on the bare rim.
"Then I was worried that I had damaged the rear suspension."

A quick inspection revealed nothing worse than a little bodywork damage: with four new tyres fitted he rushed back into the race. Now he was down in eighth place a lap behind Arnoux who was now well clear of the opposition after Pironi had stopped earlier for fresh tyres on his Ferrari.

BMW's powerful (570 bhp - official) four cylinder turbo was monotonously reliable during tests, albeit still with mechanical injection. Single KKK turbo is changed regularly as a precaution.

US-manufactured Goodyear tyres and a new honeycomb/carbon fibre chassis designed by Dr Harvey Postlethwaite look like providing an answer to Ferrari's handling problems. Perhaps surprisingly, engines proved the team's downfall in SA: more development and a little less weight should make them winners in 1982.

First lap, first corner: Prost (from the third row!) is almost with Arnoux. Next are the Ferraris, the Brabhams way back.

Just as in Las Vegas, the Michelin tyres were suffering badly from a balance problem as they picked up tyre debris from less heavily-trafficked parts of the track which they were using as they drove around the back-markers.

Arnoux's car was also suffering from a bad tyre vibration. The results could be seen in the lap times as Prost carved his way back through the field to unlap himself. Pulling away at 3 seconds per lap, victory was within his grasp in the closing stages of the race.

Back in F1, at least for the time being, Jochen Mass brought his smart March into 12th place, the best placed Pirelli customer.

"It because one of the best races of my life. I was driving as hard as I could and the challenge of getting back to the front again made it all the more rewarding," Prost explained.

With 15 laps to go Prost made it a Renault 1-2 again as he moved ahead of Pironi, also driving superbly through the field after his stop. Two laps later and Prost was back in the lead, Arnoux lapping very slowly by this time as he could barely hold on to the steering wheel, even down the straight, because of the vibration.

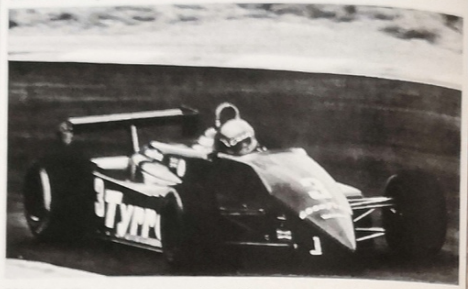
Pironi looked like catching Arnoux any moment, but then to the Renault team's relief the Ferrari was back in the pits with its engine firing on only half of its 6 cylinders.

But then along came Reutemann, the Argentine's dogged consistency paying dividends as he carefull reeled in the yellow fish ahead; ironically, neither the Renault signalling pit nor the Williams pit realised that their cars were on the same lap, and it was not until the two drivers got on the rostrum after the race that they were aware of their position. When interviewed for TV, Arnoux still believed that he had finished second.

So Prost's stop, disastrous as it seemed at the time, may well have saved his from the same "clogged tyre" rate as Arnoux. It certainly assured Prost of fastest lap, with an incredible new lap record of 134.45 mph, almost 10 mph faster than the previous best. So much for the ill-advised skirt ban which was designed to reduce lap speeds...

The luck-less Pironi made it to the finish line, but in last place after his two long stops with the only other turbo to qualify, the Toleman-Hart of Warwick ended its race parked in the catch fencing after a stop for fresh tyres. Warwick was knocked unconsciuous for several minutes when his helmet was struck by a fence post, but after a medical check was found to be unhurt.

Thanks to Prost, the predictions came true for this year's South African GP. After threatening to desert the Régie, the gode finally relented... thanks to some devilishly good driving by Alain Prost.



Michele Alboreto made a great start to the season with the Tyrrell team finishing seventh.

GPDA President Didier Pironi is a fine racer too. After a long pit stop for tyres he fought through to 2nd before another stop.

Streaming on to the back straight at Crowthorne, the Marches (green engine covers) battle with the Alfas and Daly's white Theodore.

A 'BONUS' FOR FRANK

Second and fourth places were more than Frank Williams dared to hope for from the South African Grand Prix. But with only Renault's two drivers finding the reliability which is essential to success even for a turbocar, Cosworth reliability paid off despite a serious power disadvantage.

by Mike Doodson

Kyalami was a great race for Michele Alboreto. Quick in practice, he brought his Tyrrell home in 7th place.

The affection which the Williams team still holds for Alan Jones was demonstrated just before the start of the South African GP. A grinning Charlie Crichton-Stewart held up a signal board on which someone had inscribed the the scurrilous message "1 AJ = 10 FROGS."

The sign was intended to be seen by Alan, who was sitting in the Melbourne studios of Channel 9 TV to help with the race commentary. But the South African cameraman ignored the sign (just as he ignored modst of the interesting moments of the race), and it was cast away at one side of the garage when the race was over.

In fact, the Williams team did quite nicely withut Alan. They had been slightly eclipsed during the pre-race testing by the Lauda/Watson McLaren team, "class B," but an encouraging sign was Keke Rosberg's immediate *rapport* with his new team. Keke reckoned he'd covered more miles in two test session with Williams than he'd done in two full seasons of racing with Fittipaldi. He fitted in with the mechanics and he was obviously accepted by Carlons Reutemann.

In the one session of official practice, Keke proved at last taht his talents have been squandered in an underfinanced team. His time on qualifying tyres put him behind six turbocars and 0.4 second faster than Carlos. "There's no question of any rivalry like there was between Carlos and Alan," Frank Williams insisted: "it's just that there was something wrong with Carlo's soft qualifying tyres and he did that time on race rubber."

There was a clear demonstration for keke on Saturday morning of the difference between a top team like Williams and the "Also-rans." Keke's car handled so badly that it was obviously going to need some careful attention to make it bearable in the race.

As Keke explained, racing at F1 level is a question of fractions of an inch. "There was something wrong with the skirts, I think, because eventually we put on the set which we had used the previous day, and the car came good again."

So good, in fact, that Rosberg felt sufficiently confident to make a real Jones-type start. By the end of the first lap he was lying 5th behind the rapidly disappearing Renaults and two Ferraris.

Would he keep this up? Was there any pre-arranged "deal" for him to let team leader Reutemann overtake? The question was just getting interesting on lap 7 when Carlos shot past Keke under braking and took over 5th place.

"It all seemed to go wrong on the same lap," said Keke later. "My engine seemed to go rough, I lost the gear lever knob and missed a shift as a result which probably broke a valve spring."

For Rosberg there was the agonising knowledge that if he was to complete the remaining 70 laps he would have to do so with the gear knob rolling around the pedals.

John Watson's Mc Laren which trailed Rosberg's Williams for many laps, eventually finished 6th with brake and tyre troubles.

Burning rubber at Crowthorne is Alfa man Bruno Giacomelli as he tries to outbrake Daly's Theodore.

The man who took over a champion's car, Keke Rosberg, prepares to re-make his reputation.

threatening at any time to get caught behind the brake and cause a major accident.

But Keke doesn't always consider such awful possibilities in the heat of a race, and right at this moment he was frantically holding off John Watson's Mc Laren. "If John hadn't been there I am sure that I would have backed off," he said.

For a watching Frank Williams, the disappearance one by one of the Brabham and Ferrari turbocars was like several Christmases at once.

Arnoux's Renault was in such serious trouble with its tyres that it lost a lap almost as fast as Prost caught one up. Five laps from the end, Reutmann went past Arnoux into second place. "I could see he was in trouble," said Carlos, "but my pit didn't give me a signal so I didn't know I was second until we were on the podium."

For Frank Williams, this was a totally unexpected result. "Ken Tyrrell forecast that the best result which a non-turbo could hope for here was a 4th or a 5th," he said.

Jarier's worries about racing with broken ribs were solved on the first lap when he was hit by another car.

Gilles Villeneuve chases a Renault during practice. His Ferrari went "pop" after six laps of the race. →

Eliseo Salazar, now with the smartened-up ATS, showed his increasing ability: 9th place on Avon tyres.

Derek Daly, racing the Theodore for the first time, tries to outbrake Slim Borgudd's Tyrrell.

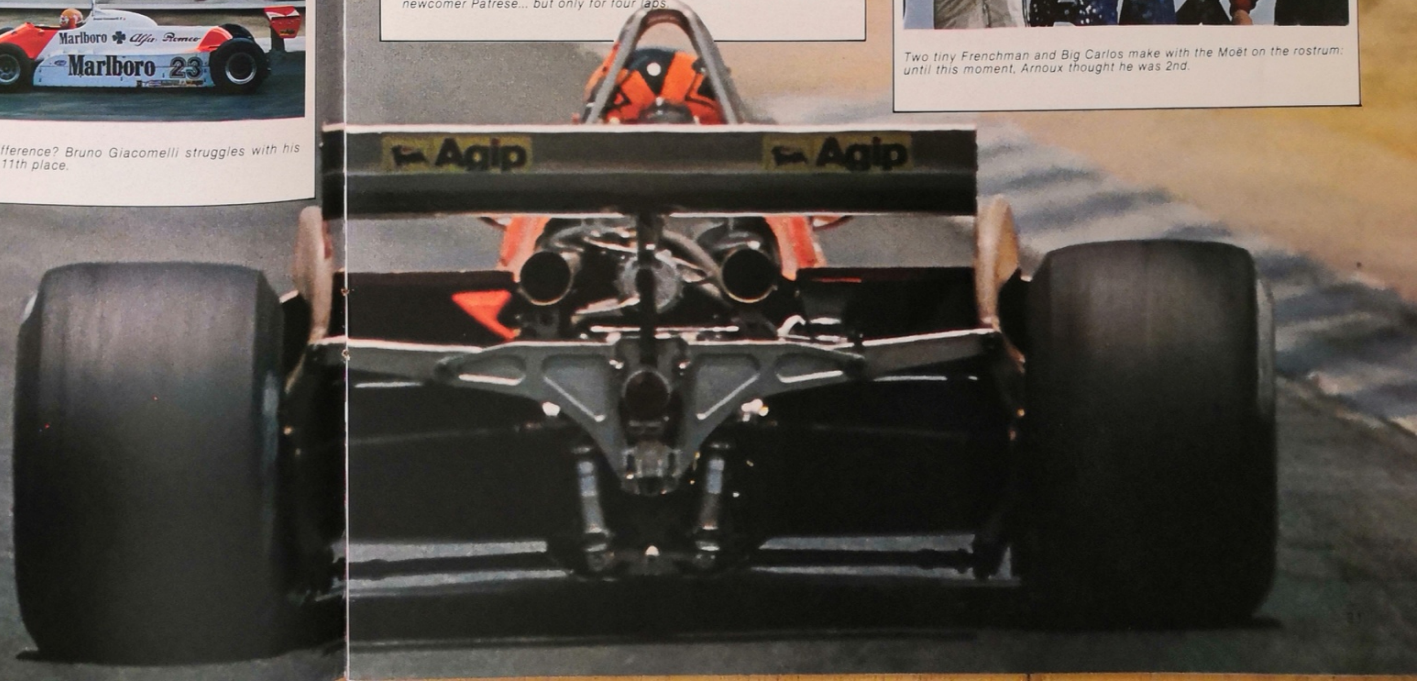
Will a turbo make any difference? Bruno Giacomelli struggles with his vibrating Alfa en route to 11th place.

"But here we are, finishing 2nd and 4th with our good old FW07 in its last race. The points we won here will be a bonus for us later in the season."
In a TV studio 12,00 miles away, no doubt a former world champion was probably thinking along the same lines. And his hold team wondered what would have happened if he had not decided to become a farmer instead of a driver.

Making his debut with Williams, Keke Rosberg valiantly held off Brabham newcomer Patrese... but only for four laps.

Alain Prost is lifted out of his Renault after the victory lap. The red flash identifies his car from Arnoux's.

Two tiny Frenchman and Big Carlos make with the Moët on the rostrum: until this moment, Arnoux thought he was 2nd.



Postcard from Kyalami

As usual, life at the Kyalami ranch provided plenty to do outside the rigours of the race track.

With the money I earn from Renault I can just keep my head above water.

I wonder how I can get some of this water in the petrol tank of the Renaults?

Hey, René, I thought you said we could go skiing this winter.

If you don't let me have the ball girls I won't play any more, so there.

That's the trouble with you Italians you run away from everything.

FACE TO FACE

BERNIE ECCLESTONE

No one commands more attention in Grand Prix racing than Bernie Ecclestone. As «Mister Big» of motor racing, he not only directs the day-to-day affairs of the all-powerful FOCA (Formula One Constructor's Association) but also owns the Brabham team which gave Nelson Piquet his 1981 world championship. Twenty-five years ago, Ecclestone was one of Britain's top Formula 3 drivers, but until he bought the Brabham team in 1971 he was known principally as a successful business man and enthusiastic gambler. Since then, he has acquired a well-justified reputation as a man of his word and a skilful political negotiator who led FOCA's successful struggle against a FISA attempt to wrest financial control of racing from the owners.

by Mike Doodson

When you bought the Brabham operation in 1971, was it your intention then to get yourself involved in the behind-the-scenes politics of racing ?
I don't have any ambitions in that area, not even now. It just happened that Brabham was a member of FOCA when I bought the company: FOCA, of course, had already existed for a number of years. Almost immediately, because of my business reputation (good or bad !), I was co-opted to look into the financial side of FOCA. But no, I never had any political ambitions in racing.

With hindsight, and especially considering the competitiveness of last year's South African GP, do you think it was the right decision to have made peace with FISA instead of going ahead with FOCA's own world championship ?
With hindsight, maybe... What motorsport needs is someone to administer it: whether it's FISA or some other body doesn't really make any difference. If FOCA had continued with the WFMS (World Federation of Motorsport), then we would have brought in outside officials. The whole thing would have been administered by a FISA-type organisation. We didn't have the fight with FISA because we didn't like being administered; it was because we thought that FISA was doing it wrongly. With the WFMS we would, in effect, have had people doing what FISA does. They would probably have done it better (than FISA), because they would only have been concerned with Formula 1 and wouldn't have got bogged down with all the politics. FISA is rather like the United Nations, constantly making concessions and compromises: they're never in a position where they can do what they really want to do, there's always someone who has to be kept happy so that he'll co-operate in something else.
I think that if we can continue in the way we're presently going with FISA, and make our Formula 1 Commission work correctly, then I think that we're better off working under FISA. If the situation ever occurred again where there was a rift, for any reason, I think it would be very easy for us to go off and do our own thing. If, for the sake of argument, the split was the fault of FISA, then I think there would be a lot of people — the ones who sat on the fence last time — who would want to support us. Presently, though, everyone is happy to go along with FISA, provided that it works with us.

Information from FOCA suggests that sponsors, not the public, pay as much as 80 per cent of the cost of staging a world championship race. Is this a heathy situation ? Can it last indefinitely ?
It's a healthy situation as long as the sponsors and the television people are happy. But there's no way that any race organiser alone could afford to pay the sort of money required to keep all the teams alive. If you take one team — say, Brabham — it will cost around ten million dollars to keep the team going in 1982. I'm not being blasé when I say «around ten milion,» because in fact I don't even know. We may have a disastrous season, with lots of engine blow-ups and accidents: on the other hand we may be lucky and win all the races. It's not a difficult calculation to count up how many teams there are like ours, add in what the smaller teams are spending, and then to estimate the costs of the really big teams, to come up with the cost of a season in FI. I've heard figures as high as 30 million dollars each for Renault and Ferrari: they can hide it and they'll say «it doesn't cost anything like that», but it probably does. Work out the total, divide it by the number of Grands Prix, and that's how much it costs each organiser. It would be impossible to charge the public for all that...
The big danger which I see on the horizon is if the small teams are forced out. And when I say «small,» I include Brabham, Williams and Lotus. If they were forced out of racing because they couldn't remain competitive enough to get sponsorship, then the sport would be left in the hands of the Renaults, Ferraris and Alfa Romeos. But those teams aren't going to stay in racing indefinitely, so what would happen to motor racing when they stopped ? It isn't going to be the decision of the people in the racing departments: these decisions are taken by the advertising and marketing people. They could easily say «Look, there are only ten or twelve teams in racing at present: the sort of money we're spending isn't justified, so we're pulling out.» Then Formula 1 would disappear. I believe that with the sport going the way it is at present there's no point in any of us making forward plans for 1983 or 1984, because I don't think there'll be any Formula 1 in 1984. Certainly, by 1983, racing won't be at all like it is today...

What about really small teams like Ensign or Osella ? Is there any future for them ?
Teams like them work on very small budgets indeed. They know in advance that they're not going to win, in fact for some of them it's a big achievement just to qualify. But the other teams need them because they bring on the new drivers. We all need each other: the Renault team needs us, for example. Sometimes, though, I wonder how the very small teams manage to get from race to race. Being in Formula 1 is a bit like a war: you can't make a sensible budget. «Let's declare war on Poland: how much have we got to spend ?... FI is like that, you spend however much it takes.
Take, for example, the situation in our team, Brabham. We've got a turbo engine, the BMW, so let's assume for argument's sake that it's better than a Cosworth. Our financial agreement with BMW is a good one, and hopefully it will also be good from a technical point of view. Now, if the BMW wins a lot of races it will be made available to the other teams. People will then have to buy BMWs instead of Cosworths... but they won't be able to afford them, because they're certainly going to blow them up, both in qualifying and racing.
In reality, it looks as though the BMW will soon be useless, because there's a new engine that Cosworth is building which will produce 800 horsepower. I could buy that engine — so could you — but first I would have to find the money, and then I would have to scrap everything which I have at the moment: cars, engines, gearboxes... the lot. I would have to build a completely new racing car, from scratch, and that's not only going to cost a fortune, it's probably not going to be reliable either for two or three years. Let's assume then that it is at last reliable and that somehow I've been able to find the money: by then Renault won't be able to compete, so they'll drop out. If all that happens, then Formula 1 will just disappear, it'll destroy itself.
So we need to find some way of stopping this escalation. I'd like to see a 3-litre normally-aspirated formula, I don't like «turbo-equivalence» formulae at all. Maybe we shouldn't stop the engines we've got, but we have to stop the monster engines which are being planned. This is an immediate problem which demands some effective action from FISA. We have our Concord Agreement, which involved making a lot of compromises that most of us are now regretting...

Is there any way out ?
If there was unanimous agreement, we could change it right now. I entirely agree with a couple of things which Colin Chapman has suggested. First, he says, the «stability» rule should last for two years, not three, four or five. And as Colin says, it is very difficult for us, as competitors, to write those rules less than two years ahead: we tend to look only as far ahead as the next race. We want to know that if we are very ingenious and invent something really clever, then we'll be able to race it for two years before it's stopped. If it's quick, OK, because that's what motor racing is all about, beating the other guy.

Turning to the Brabham team, it wasn't until ten years after you'd bought the company that you won a world title. Do you think you would have done it sooner if Brabham affairs, and not FOCA, had been your first priority ?
I don't think I had anything to do with winning the world championship, so I can't possibly say «Yes» to the question. I have no idea how important my contribution to Brabham makes to the team's success, so I can't really answer. Getting more points than the next guy, and winning the world championship, is what racing is all about. But I think you need quite a lot of luck to do it. We should have won the championship in '74 and '75, but we didn't. I think you have to discount the later years when we ran the Alfa Romeo engine, because that was a three and half or four year development programme, which is too long. It wasn't our fault and it wasn't Alfa's: we chose to get into bed together... and it didn't work, so we got a divorce and did our own things.
I believe, though, that we should have won the championship in 1980. I would have preferred to have won it in '80, because I think Nelson deserved to win it that year. I also think that Jones deserved to win in 1981... which is the reverse of what happened.

How did you you celebrate Nelson's success after Las Vegas ?
I don't think I did. I'm not orientated towards success and failure in that sort of way: I don't get depressed when we lose and I don't get excited when we win. What we're trying to do is to win, so when we are successful it means that we've done our job correctly. Why get excited ? Maybe we should be more analytical when we lose...

You used to have a reputation as a serious gambler, someone who won and lost large sums of money from time to time. Do you have any opportunities now for sports or other interests outside racing ?
It would be a fair assessment of my gambling. I don't play very often these days, not so much because I can't find the time but because I don't find the games as stimulating or exciting as I used to do. It's a different kind of person who's gambling in London now.

What sort of business interests do you have outside racing ?
A bit of property development and financing. I'm still active, but not to any great extent. I spend most of my time working on FOCA things.

Among the many drivers you've known over the past 25 years or so, which are the ones that you admired the most ?
That's difficult, because it's impossible to make an assessment until you know people really well, and I haven't known many of them at all well. Jochen Rindt and I were very close... I enjoyed a good friendship with Carlos Pace... and Pedro Rodriguez was quite close. Those are the ones that stand out for me. Jochen only really «came good» in Formula 1 when he signed for Lotus: ultimately it may have been the wrong thing, but in terms of results it paid off. In his era, he was without any doubt the best driver, because he could beat everyone in F2. Likewise, Pedro was probably the best driver when he was killed, but unlike Jochen he never got himself into the right car.
That's the whole problem with assessing a driver: he's got to be good, but he's also got to have the right car and a bit of luck. I mean, Jackie Stewart was obviously the best driver within my memory but you only have to look at what's happened to the Tyrrell team since Stewart left to see how things can change. I'm sure that Ken hasn't changed, nor has his team... it's just that they were all motivated to win with Jackie, and something fundamental has happened.
Nelson fitted well into our team, and the team was rooting for him 100 per cent. It's a two-way thing, and he was obviously working well for us, he was part of the team. There are a lot of drivers who come and go in a team, they're not really part of anything, they're just racing.

Do you have any unfulfilled ambitions in life ? For example...
No, no. At least I couldn't tell you of any !

□

TECHNICAL

BRABHAM BT 49

Strangely enough, the Brabham which allowed Nelson Piquet to take the world title is, with the Williams, one of the oldest single seaters in the F1 line-up. The BT 49's debut goes back to the 1979 Canadian GP, a first appearance clouded over at the time of Niki Lauda's accident...

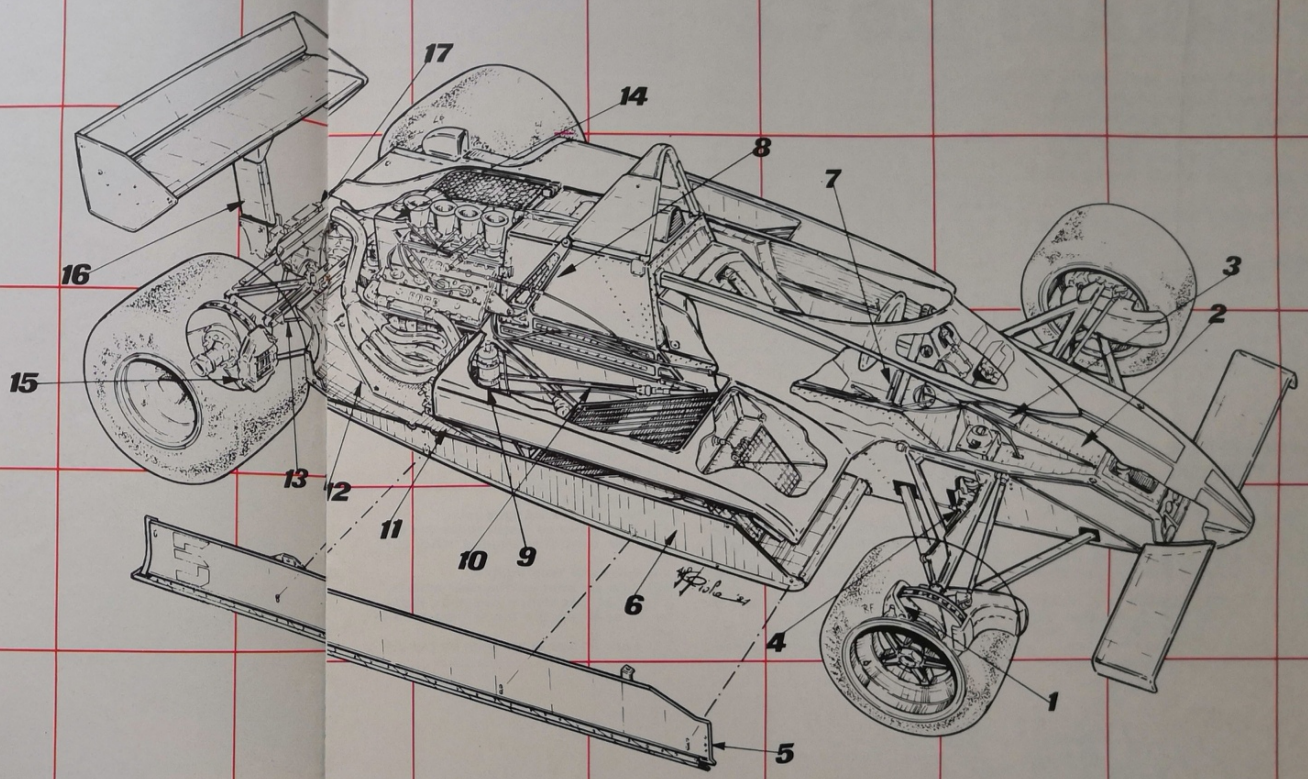
by Giorgio PIOLA

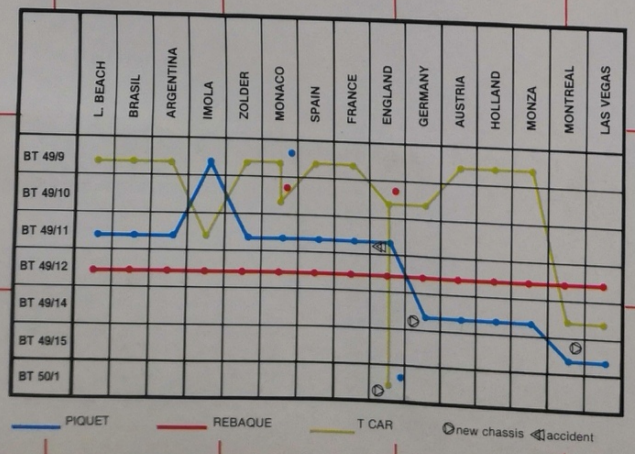
The car's basic characteristics are in fact the same as the Williams: simplicity, lightness and technical efficiency. If on the outside the BT 49 has hardly changed, it has however undergone a remarkable technical developement under Gordon Murray's direction. Thus the chassis has been variously modified to increase its rigidity while the wheel-base was lengthened last year to allow for a new front suspension. But there's no denying that one of the keys of the Brabham's success was the skill with which Gordon Murray got round the famous 6 centimetre clearance rule. Rebaque's performance in Argentina says a lot for the Brabham's superiority in the early season. Murray fitted his cars with hydro-pneumatic suspension. In the pits his ensured the chassis complied with the 6 centimetre rule, before grazing the tarmac at high-speed under the force of air-flow. Murray's colleagues kicked up a big outcry, shouted their outrage and after efforts failed to have the BT 49 banned, rushed off to copy the English engineer.

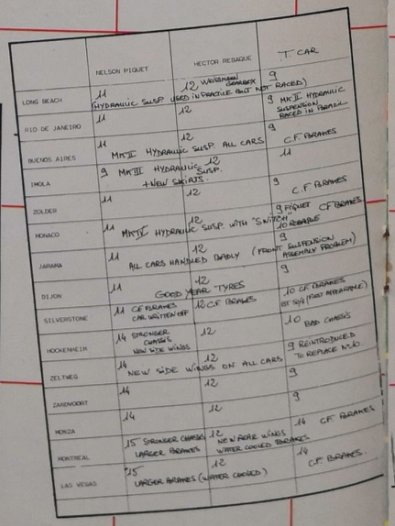
But the new versions were not up to the original: there were wooden suspensions and the lowering of the car controlled by the driver from his seat. The Brabhams managed to keep their initial lead with their rising-rate suspensions, a singular innovation present on all Gordon Murray's single seaters. A curved bar joins the lower fixed point of the shock absorber to the upper wishbone. This smart idea gives the single seater increased freedom of suspension over the traditional hydraulic cylinder coaxially aligned with the shock absorber. Furthermore, Brabham and Williams abandoned Michelin for Goodyear after the French GP. A change which seemed to penalize the Williams stable since it never seemed to achieve good results with the 13 inch front tyres; this was not the case for Brabham.

A part from constant aerodynamic modifications the Brabham hardly changed throughout the season. A point worth mentioning is that during the development of the BT 49, Murray used a large number of compact parts with square components, leaving the welded arms and side-members for extra reinforcement. The BT 49 posseses carbon fibre panels in the upper body, and if the Weissman gear-box was practically abandoned, the Brabham made special use of the spare car during trials, and carbon fibre brakes which reduced by a third the weight of the unsupported parts. In fact Brabham and Williams were strongly criticised for developing cars this side of the minimum weight. The two teams were using water cooled brakes as weight savers which when required allowed a few litres of water to be poured into the 15 litre tank at the end of the race.

To cover the '81 season, Brabham resorted to six BT 49 chassis while the first BT 50 chassis was being readied to take the turbo. The current vehicle has an unmistakeable family resemblance to the BT 49 whose overhall body and suspension design it borrows. However it is 4 cms shorter than its predecessor and its body is reinforced. For obvious reasons its tank is higher and larger in length and width.







DESCRIPTION OF THE BRABHAM BT 49

1) The Brabham is the only car equipped with Girling callipers with two hydraulic cylinders.
2) The Brabham's body consists of body unrounded layers of framed aluminium, the upper panels of carbon fibre.
3) Front anti-roll bar linkage.
4) Bracketed hydraulic cylinder joining the shock absorber to the upper triangle.
5) Detachable side panels and skirts to permit rapid changes during trials.
6) The sides are again in two parts of which the lower offers the exact profile of the wing.
7) Instrument which indicates to the driver the height of the skirts.
8) A variously reinforced chassis throughout.
9) Compressed air cylinder.
10) Gear-box linkage outside the chassis.
11) The upper and lower parts of the side pods do not exactly coincide. The gap between them houses the flanks.
12) Asbestos protection of the carbon fibre side-face.
13) Rear suspension almost totally composed of turned parts.
14) Oil tank between the motor and the gear-box.
15) Double pump Girling callipers.
16) Simple and functional central support for the rear aerofoil.
17) Gear-box oil radiator.

TECHNICAL

FERRARI 126 C2

The new Ferrari represents an important development in the history of the Scuderia single-seaters. In fact its the first Ferrari to have a single cast chassis with bees' nest panels.

by Giorgio PIOLA

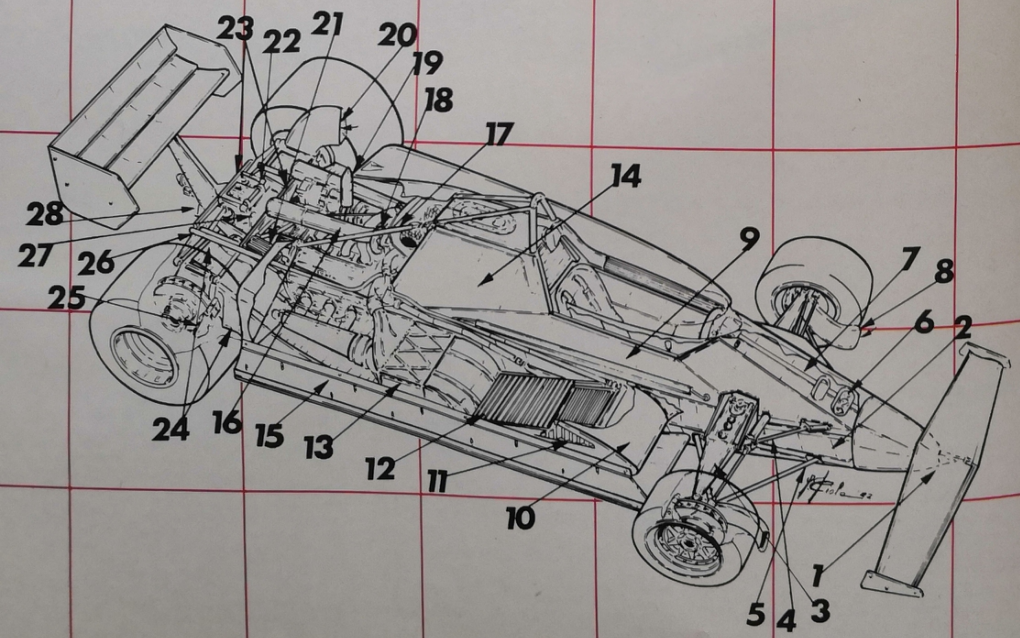
There's nothing surprising about this if one considers that last year Ferrari employed the English engineer Harvey Postlethwaite, a specialist in this kind of chassis, who ordered parts from an American company called Hexcelli. The use of carbon fibre has so far been restricted to a few chassis side members, in the most desirable places. Mauro Forghieri admitted that he considered a number of futuristic solutions before returning to the proven designs. For example the final side-member on which the motor is mounted and the part of the chassis where the suspension mounts are located, are both in aluminium. This chassis has two principal characteristics. Initially a shell formed of two longitudinally assembled half-shells, as on the Fittipaldi. Then, no rivets, but a special glue to fix the different panels. The weight saved on the chassis is in the order of 5 kilos, an effective gain of 15 %. In total, the new Ferrari has the measure of 60 kilos on the old model and thus almost reaches the weight limit.

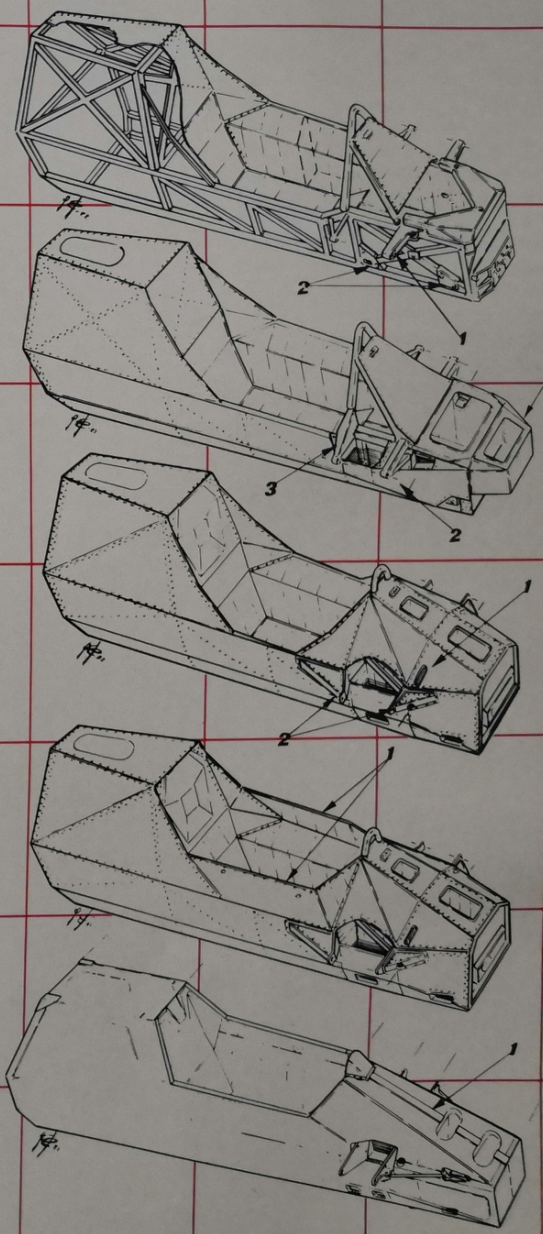
A double objective of lightness and simplicity has characterised the conception of the Ferrari 126 C2, which made a considerable impact at its unveiling. The aerodynamics have undergone considerable modifications. The bodywork is more curved and refined in the front while the lower part is in one piece and includes the lateral aerofoils. Note that Ferrari's aerodynamics experts had the opportunity to work on a laboratory vehicle. The suspension is completely new and the forward slanting upper rocker arm has been removed, thus enabling a reduction of 6 centimetres in the wheel base. A lower and longer fuel tank causes a different weight distribution. The gear-box has been modified, thus reducing latera blockage and improving air flow. A longitudinal bear-box is being considered. However what really comes over on the first look at the new Ferrari, is its extreme simplicity which contrasts with previous single-seaters built at Maranello.

TECHNICAL CARD: Wheel-Base *265 cms*, front *179 cms*, rear *164 cms*, overall lenght *433 cms*. Weight *599 kilos* (actually 582 kilos).

DESCRIPTION OF THE FERRARI 126 C2

1) Front wing (width of the car) with a central support (abandonned on the last model of the 126 CK).
2) The new chassis in honey comb aluminium with carbon fibre side-members is much straighter and cleaner.
3) New forward slanting top rocker arm no longer inclined towards the front as on the 126 CK, which thus reduces the wheel-base by 6 cms.
4) Strengthened steering bolted to the chassis. The chassis is not riveted but glued with a new product.
5) Wide based lower wishbone.
6) Opening to allow access to the pedals and brake and clutch fluids reservoirs.
7) The half shells which form the chassis are attached in the longitudinal axis.
8) Downward inclined air inlet for the brakes.
9) The central part of the chassis is very high.
10) The side bodywork behind the front wheels is very low and rounded.
11) Hot air outlet.
12) On each side there is a lower water radiator and an oil radiator.
13) Heat exchanger.
14) The tank is lower and longer.
15) Two piece sides.
16) New elongated exhausts.
17) Strengthened motor mountings.
18) Two centrally aligned KKK turbos.
19) Valves or Wastegates.
20) New air inlet for the rear brakes.
21) Upper positioned gear-box radiator to open up the lower part of the car.
22) Anti roll bar adjustable by the driver.





'81: Half a dozen chassis

From the following line-up of different bodies can be traced the development through the 81 season giving rise to the Ferrari 126 C2 chassis.
In 1981 six bodies were completed.

Design A: The first three bodies are identical, in the classic Ferrari style. Note the forged suspension attachment arm (1) and the lower mounts.

Design B: Afeter Imola, the new bodies appeared (52, 53 and 54) with the modified front end.
1) Protective pedal housing.
2) The front end of the chassis is reinforced and slightly larger.
3) Suspension attachment points in titanium.

Design C: Modification of the first three bodies.
1) Reinforced and larger front end.
2) Reinforced front suspension attachment points.

Design D: Lateral reinforcements appeared in the 126 Ck at the Paul Ricard trials.

Design E: Finally, the new Ferrari 126 C2 chassis built in two half bodies of honey comb aluminium, as on the Fittipaldi, but glued, not riveted.

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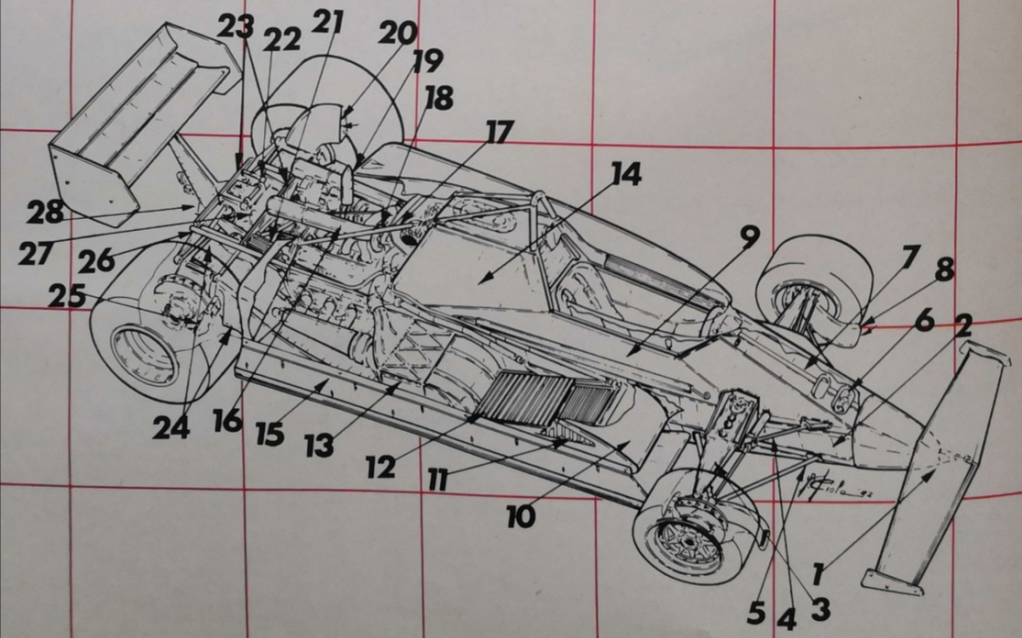

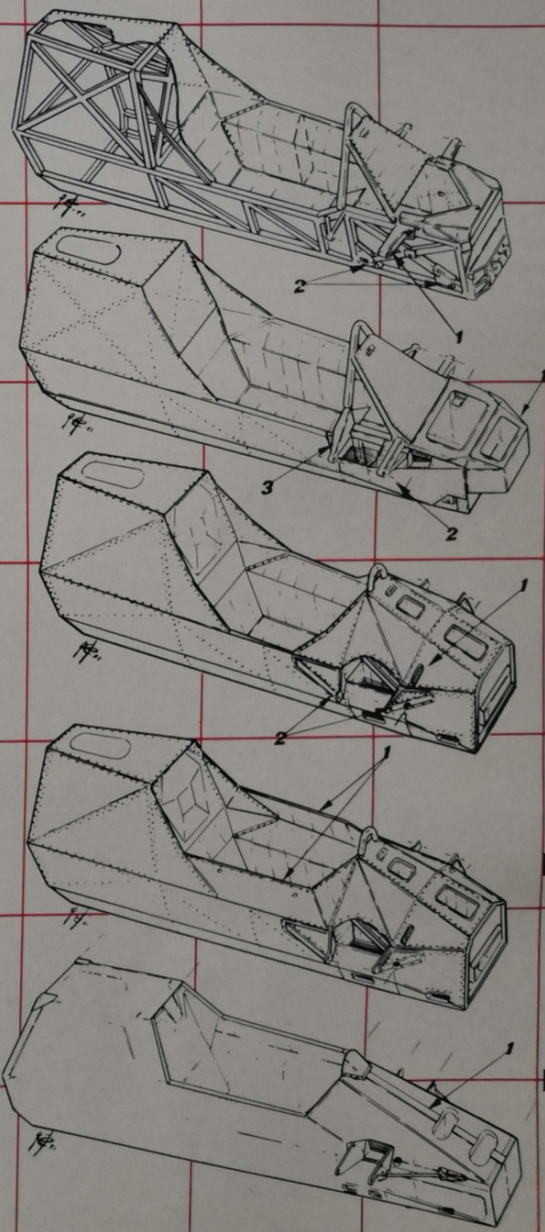

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DOES DRIVING ABILITY MATTER ANY MORE?

The question goes back to not long ago, when the car to beat was the Lotus 79, the first in F1 to exploit the principle of ground effect. Somebody once spoke about Colin Champan's drivers as mere «chauffeurs», and the record shows that Mario Andretti and Ronnie Peterson racked up victories with disconcerting nonchalance. It was tempting at the time to attribute all of Lotus' success to the superiority of the cars rather than the drivers. Indeed, ever since then, many racing pundits have given credit more to the car than to the driver. Is this true or false?

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Significant pointer can be found in the attitude of racing journalists as they ferret out information after a practice session. More often than not, the questions they ask are technical in tone: they want to know about the behaviour of the car. How does it feel in a given aerodynamic set-up ? Did it go faster after a certain adjustment had been made ? What boost pressure was the driver using when he did his quick time ? What was the type wear on compound X ?

The driver gets scant attention. His personal motivation, his physical fitness, his hipes and his worries: these are rarely questioned, except perhaps in the case of Carlos Reutemann. But then he is renowned for his moods.

The hardware never stops being developed. It conditions so many factors. Those who follow the sport get used to this: they soon get the thread. It remains a headache for those who aren't engineers. But there is no alternative.

More and more in FI racing, the subject of conversation in pit and press-room is of new wing profiles or tyre constructions. Many «specialist» journalists even limit their pre-race discussions to the technical men in the team, not the drivers. This is not just because the drivers — dashing from de-brief to committee meeting in between endless TV and radio interviews — have become less available than they used to be: above all, it is because the real competition these days is as much between the engineers as it is between the men in the cars. Does this really mean that the driver has become less important ? There is no easy answer...

It must be said that the evidence against the driver is convincing. Mario Andretti, for example, hasn't had a single GP win since he won the world championship in 1978. Obviously he hasn't had a winning chassis under him over the last three years: thus it would be easy to conclude that the true champion of 1978 was the Lotus 79, not Mario. Similarly, there are those who believe that Nelson Piquet won the title in 1981 because he happened to be in the best car. The inference is that Brabham designer Gordon Murray deserves the credit for the team's success. So who *was* champion ? Piquet or Murray ?

«Unless he's got a good car, there is no way that a driver will win races». That is the categoric conclusion of Jean-Pierre Jabouille, a driver who retired to become an engineer. Jabouille's maxim, if it's true, suggests that a driver's luck is irremediably wound up in the excellence or otherwise of his car, that there is no compensating for car deficiencies with superior driving talent. The conclusion is both true and false.

Consider. A good driver in a bad car can show his ability and get himself noticed. Among the many examples: Messrs Andretti and Peterson. But it never follows that a less than able driver in a good car will automatically win races. This fact, which is well recognised, puts the driver's role into its true perspective. Drivers are not merely «chauffeurs».

«An intelligent approach is vital,» says Renault's Gérard Larrousse: *«it makes the difference between an averagely good driver and a great one. Say there's a shower of rain towards the end of a race: the outstanding driver will use it to his advantage in some way. The average guy just slows down. If his car starts to handle badly, an average driver gets disheartened. But a really top driver knows how to bring it home in the best possible finishing position...»*

Larousse, as a one-time driver himself, speaks with authority. So does Jabouille, whose theories on the subject are very similar. *«A driver is one hundred per cent responsible for a victory,»* says Jabouille. *«In the space of the average GP, say an hour and a half, lots of things can happen. It is necessary to follow the race intelligently, even to be a bit clairvoyant, by sensing the condition of the track and the temperature and knowing how they will affect the performance of the car and the tyres. Anybody can drive on balls-out lap, but it's much more difficult to stretch your ability over a full 80-lap race. There are not many drivers who can.»* McLaren International's Ron Dennis agrees. *«It is vital to bring the car home in the best position which it is capable of achieving. The driver must be able to produce one hundred per cent effort from beginning to end.»*

As can be seen, therefore, a driver's ability is just as important as ever. The day has yet to come when a stroke of good luck will put an undeserving «noddy» into a half decent car and send him on his way to the champagne and laurels on the top step of the podium. It is just as easy to make mistakes as ever it was, even though they may be less obvious than they once were. It's one thing to avoid going off the road, quite another to lift off for ten laps early in the race so that the tyres can be spared for a «charge» in the closing laps.

In the heat of a scrap, that sort of precaution tends to get overlooked by many drivers. Anticipation should be part of the maturity which a great driver acquires. And it is in this way that good driving can make the difference between winning and losing.

Ability is equally important during testing or qualifying. Ron Dennis makes the interesting point that this is an aspect which has changed over the past ten years or so: *«I think in the past that the driver was a more diagnostic animal than he is today, when most of the car's balance is predetermined by the aerodynamic set-up achieved as a result of wind tunnel testing. The driver has become a fine-tuning instrument, as opposed to being a major diagnostic element. However, he's still as important as he was, because the overall package — car and its set-up — has become so much more competitive than it used to be. Although the driver's percentage input is less nowadays, it's still as important because only one per cent can make the difference between winning and losing. It's developed to such a pitch that the best drivers are going to win the races.»*

A role which makes the modern driver an essential part of a car's performance is his ability to pass on information about its behaviour to his engineer. As Gordon Murray says, «The driver is probably twice as important now as he was when I started at Brabham twelve years ago. The driver has to be able to explain exactly how the car is handling, because the engineer relies entirely on this information. Ten years ago, most top drivers solved handling problems by adapting their style, often unconsciously, and driving round them. You can't afford to do that today: you have to get to the bottom of the problem and sort it out, to ensure that the car is balanced throughout the race. It's also very useful when a driver can recall similar problems that he may have had on a previous occasion, so that we can make the same adjustment.»

This is an opinion which is shared by Gérard Larrousse. *«Simple talent is just not enough,»* he says: *«a driver has to be able to sort out his car. He alone in the team can pass this information to the engineers. It is another aspect of the sport in which a great driver will stand out from an average one. A great driver knows how to describe exactly what his car is doing when it's on the limit: nobody's interested in its behaviour at two seconds a lap under its potential. A good driver will perform on the limit in testing and practice, then come back with his analysis of its behaviour.*

«He must be entirely cold-blooded in his approach, driving flat-out, and at the same time absorbing the information, analysing it and remembering it for later. Not all drivers can be as analytical as that. Some of them are quick, yes, but as soon as they step out of the car to describe things dispassionately, without any personal interpretation, otherwise what he tells the engineers may not be the whole story.»

For the driver, this is a heavy responsibility and a tough job. Whether in official qualifying or unofficial testing, he is expected to drive flat out, even if he doesn't feel particulary motivated to do so. Chasing the last tenth of a second for no apparent reward cannot be easy. Taking exactly the same line every lap, always braking at the same marker: these are essential if the test is to have any value at all. Doing it lap after lap, in itself, is difficult enough, but on top of that he must make constant mental notes of the car's behaviour and remember them exactly. To do it right you need a rare combination of experience and motivation.

To his role at race meeting or test session, there is a third important quality his attitude in the paddock or in the motorhome. It, too, can make the difference. *«A driver's relations with his team are vital if he's going to do well,»* says Larrousse. *«The atmosphere is extremely tense in FI. Even when you've scored a great win, you don't enjoy its full flavour unless there is a good spirit between the team and the driver. And the team members will always react more positively when they have a real star, as opposed to an average guy. Everyone works that much harder when they know that the driver is an ace. I would also say that a top driver will demand a lot from his team: he can't afford to leave anything to luck, either with the handling or his own personal comfort in the car. A good driver will always be a bit temperamental. It's part of a winner's make-up.»*

As Jean-Pierre Jabouille sums up, *«a driver must know how to lead his team to win the world championship. Every driver is certain that he is the fastest in the world: the trick is to persuade his team that he's right. The men who do the work must have that sort of motivation.»*

Do you still dare to describe that sort of man as just another «chauffeur»? □

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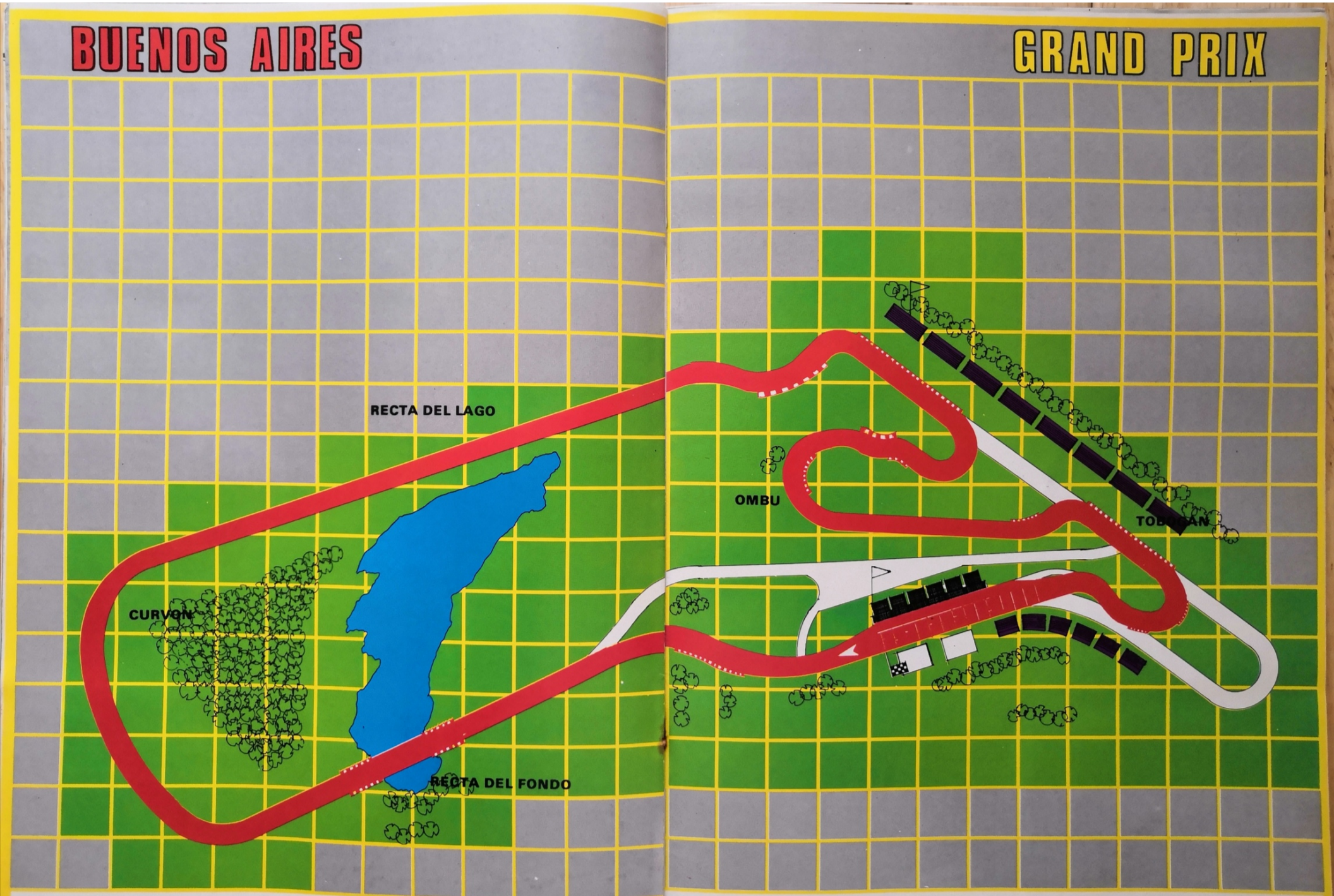
BUENOS AIRES GRAND PRIX



YOUR TV GUIDE MAP
FOR THE NEXT GRAND PRIX.

BUENOS AIRES - MARCH The 7th 1982.
Length : 3.708 Miles/5.9682 Kms.
Distance : 53 Laps/196.548 Miles - 316.31 Kms.

NIKI LAUDA: A NEW MAN RETURNS

Niki Lauda : a considerable ace for the Ron Dennis and Teddy Mayer team.

«Fitter than ever,» is the way Niki Lauda, twice world champion, 17 times GP winner, throws himself into his 1982 comeback. «I have never been in such good physical condition,» he says, «but for the performance on the day, well, that will depend on the car.» The Austrian is looking forward to his first race for two and a half years since Imola 79 and his first with a Ford-Cosworth-DFV since his Formula One debut with March back in '72. From then on Niki drove 12-cylinders exclusively - BRM, Ferrari, Alfa in the Brabham chassis.

by Heinz Prüller

Can Niki take up exactly where he left off in September '79 ? Trouble free, with no problems ? Does he in fact have the feeling he's never been off the track ? «*Not yet. To be honest, I feel I've been out of racing for ten years. Cars have changed so much in the last two years. Nowadays they handle badly.*»

However the 1982 Lauda image looks, in any case different from the 1979 image; the red helmet emblazoned with his name has gone. The new helmet will be white, the chin protector, in Austrian colours, a patriotic band of red, white and red. It's still a Bell, round and smooth with no sharp edges, the helmet Niki has always preferred. And with reason, as the test drive accident at Paul Ricard has shown.

John Watson his teammate was testing tyres all day. Niki only took over the wheel at 4.30. Willi Dungl, the sports physiotherapist with golden hands and Niki's good-luck mascot' had driven down to the village to buy .

McLaren : will this team be able to match the ambitions of the ex-worldchampion ?

health food. «*Don't bother to come back,*» said Niki, «*See you back at the hotel.*» But Dungl had a premonition that something would go wrong and returned to the track.
The stopwatches read 1 m 6 secs, 1 m 5.4 secs, 1 m 5 secs — but then on the fourth lap in the 160 mph right-hander 'Courbe de Signe', the moment that Willi feared. Front suspension failure, probably a mechanical fault, the front right-hand wheel lifting. «*I knew there was nothing I could do,*» says Niki. «*So I ducked right down into the cockpit. The car went through the catchfences, and everything flew over my head. The bloody posts were plastic, thank God, they gave under the impact — but the visor was ripped from my helmet, and I closed my eyes.*»

After a while, a seeming eternity, Niki opened his eyes, he was ready to get out but the car was still rolling. «*In two and a half years I had completely forgotten how long a crash takes — the car was still moving. So I courched down in the cockpit again.*» Eventually the MP 4/1 came to a standstill on the guard rails. This is the same car that de Cesaris crashed so many times throughout the '81 Formula One season.

Niki's first thought was that «*the bodywork was neither dented or smashed, but still looked new, which proves just how safe and strong the carbon-fibre chassis really is.*» Next, he was quickly out of the car to check for skid marks etc. Above all, he was unshaken; untroubled that such an accident should occur, his first due to a mechanical fault since the Brabham's total brake failure in the Interlagos hairping during a December '78 test run. «*Now at least I know how to survive such accidents*», he said. «*You see, I'm completely back in business.*»

Kyalami: Technical Trials
While the Michelin engineers made copious notes and showed willing, Niki tried for weeks, in close collaboration with McLaren's engaging chief designer John Barnard, to cure the permanent understeer. For the South African GP the aerodynamics of the wing profile, the underbody and the suspension will be completely modified.

«*At the factory, the car was constantly in the wind tunnel. They worked day and night,*» says Niki. «*But there's been no opportunity for a retest before Kyalami. Either it works or I'm wrong. We'll see.*» However the extreme challenge is something that Niki has always relished. «*Because we can't be completely sure, I'm looking forward to the comeback enormously.*»

Later for the hot weather races in South America, Ron Dennis is planning another big surprise. Heat shields from the NASA space shuttle 'Columbia', to keep the engine cool. NASA decided there would be no sales or gifts to souvenir hunters, though Dennis managed to clinch the deal 'in the name of Research and Development'.
Niki and the MP 4 'rocket' (space shuttle parts installed) will probably turn out to be one of the hottest driver-car combinations for 1982. But Lauda doesn't like to talk of winning from the start. «*What I need is patience. There's still a long way to go.*» And one musn't forget that he hasn't raced against more than half the current FI field. Though hard to believe, when Niki fell out, Marc Surer, was stil a new boy while Alain Prost hadn't even started in Formula One.

Lauda 82 : surely a good year.

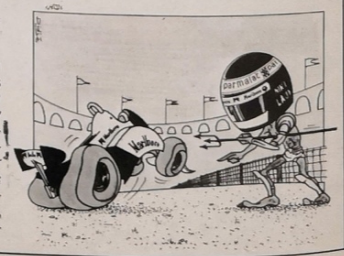
«*God knows, maybe the young lions have developed new techniques which I won't be able to cope with,*» commented Niki, when for the first time he met up again with the others in Le Castellet. His ex-Brabham pupil, Nelson Piquet and Gilles Villeneuve, who succeeded him in Ferraris, were the most friendly. «*For quite a while I wondered whether I still had the speed; I was quite pleased when I realised I still had it. And my 'sensitive arse', the secret of a few former victories, that's not lost either.*»

Only the colossal G-forces make him think. And the fact that today's cars are so inconvenient to drive. «*You have to make so many compromises,*» he says, «*for a reasonalby quick lap time you have to recover. The secret today, is to set the car up so that you're as comfortable as possible — but still capable of driving fast.*» Niki finds Michelin tyres, «*better suited to the McLaren,*» marginally quicker, «*but also more difficult to drive, especially to the limit, because they have so much grip.*»
There's no doubt about Lauda's physical condition, he's in very good shape: a trim 143 lbs and not an ounce of fat. But to achieve that condition he's worked. Quietly since May, but more seriously since September. Jogging, cycling, cross-country, skiing, plus a good deal of gymnastics — especially to strengthen the neck and shoulders. Racing drivers understand the need for strong neck muscles. Ask James Hunt why he practised headers for months at the Chelsea Football Club. Or why Jody Scheckter was even lifting weights in his living room.

«*The best Lauda I have had under my hands,*» is how Willi Dungl puts it. To develop 'his competitive drive', they even went alpine skiing in a tyrolean valley. Ron Dennis was with them, new to the slopes, but very ambitious, perhaps excited by Teddy Mayer's sensational skiing. Dennis practised every day, even in bad weather, while Dungl eased away the cramps and stiff muscles. Back on the Cross Country slopes, Lauda and Dungl staged a bet; every time Dungl fell Niki had to run an extra mile. And Dungl was merciless, he kept Niki going all day, until eventually Lauda shouted, «*Stop ! Willi, I don't want to be a Cross Country champion. Hey ! I want only to be a Formula One champion.*»

It was said as a joke, but...

□



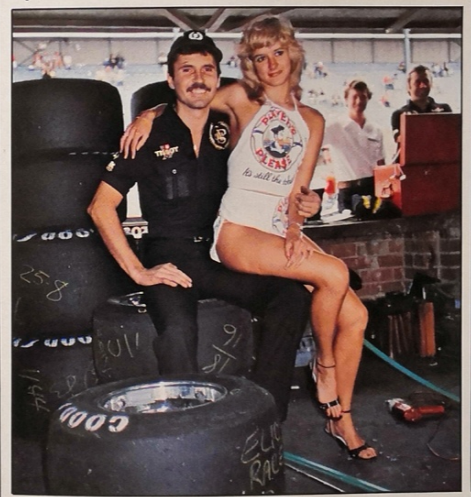
Postcard from Kyalami

An impressive gymnastic display by a team of singing black Gymnasts was part of the pre-race entertainment.

The Kyalami track always attracts hundreds of campers who can camp right next to the track to drink beer, barbecue meat and watch the action.

Sunday the 24th, French TV, in Paris: Alain Prost talks about the Grand Prix... International, of course.

What would the Italian teams do for a dinner table if the FISA banned side pods.



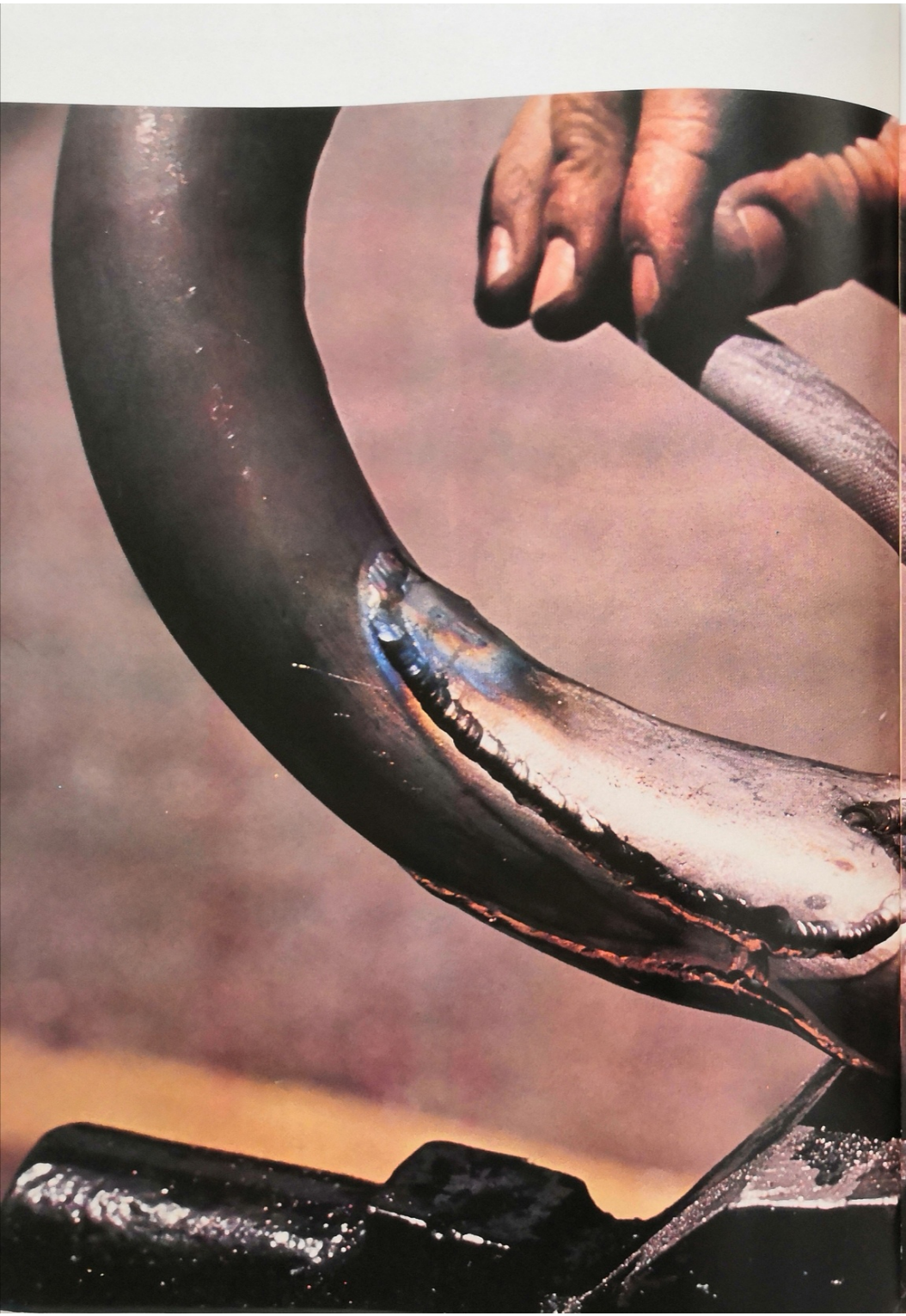
It's tough being a race mechanic almost as tough as being a photographer...

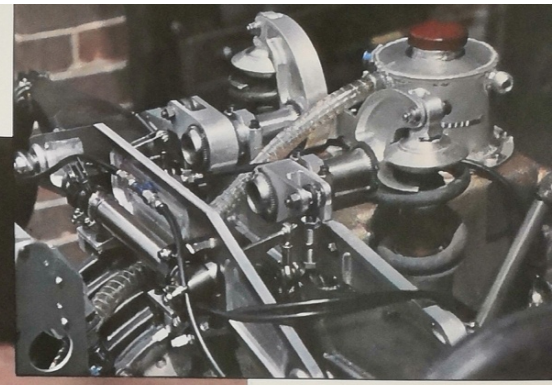
Jochen Mass junior getting all stuck up in motor racing... when nobody is looking.

If it looks different and runs, you will see some interesting cars out on the Kyalami track at Grand Prix time.

BLOWING IN THE WIND

Up in the rarefied atmosphere of the Kyalami track if you want to get ahead you've got to get a turbo. The 1500cc turbocharged engines from Ferrari (left) Renault (center) and the new BMW (right) set the pace throughout the weekend, but only Renault had the reliability to go the distance, taking first and third place despite tyre problems which almost cost them the race.





THE STATE OF THE ART

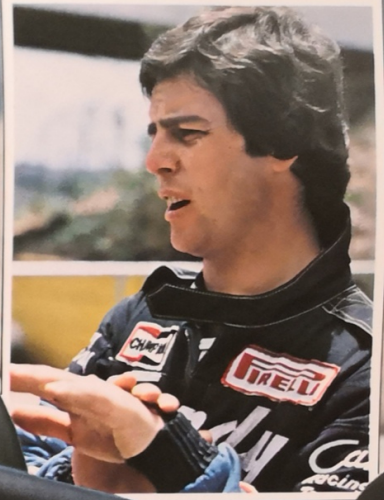
The new rear suspension of the Osella showed the usual Italian attention to detail.

Every part of a modern day Grand Prix car is a hand make work of art.

One of the latest tricks to play with the F1 weight limit is to fit water cooled brakes the water doing little else than boost the car's weight should it be needed on the scrutineer's scales.

HART-ACHE FOR DEREK

Derek Warwick was able to make full use of his turbo-charged Hart engine in practice to quality the Tole-man well up the grid, but an accident in the race saw him lucky to escape with no more than a couple of minutes K.O. when a fence post his him on the head. Teo Fabi was unlucky not to qualify when a turbo-bearing failure cut his practice short.



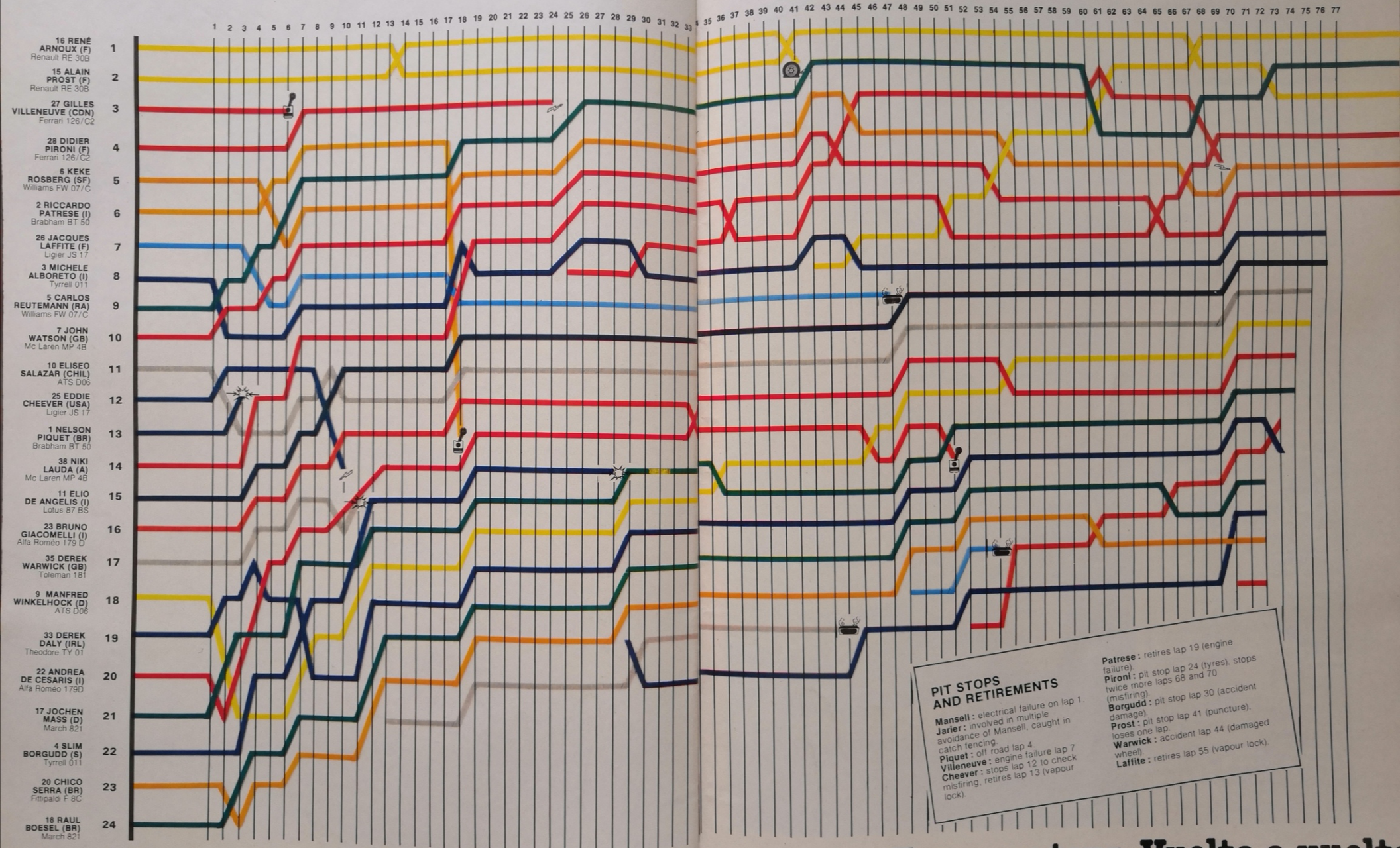
MOMENT OF TRUTH FOR THE CHAMPION

Caught napping at the green light, Nelson Piquet made the worst start of his career at Kyalami and was lying 14th at the end of lap 1. Two laps later, as he battled past back-markers, his new and very rapid Brabham-BMW turbocar snapped out of control at Crowthorne corner and headed straight for the catch fences. It was a relieved Nelson who climbed out unhurt and walked back to the pits. Photos: Bernard Asset.

SUPER RAT IS BACK AND HOW!

For the first half of the South African GP, Niki Lauda was taking things comparatively easy. He handled a challenge from the Lotus 87B of Elio de Angelis for 10th place with great skill, and as retirements thinned the field he moved up to seventh place behind his Mc Laren team mate John Watson. In the last 15 laps, despite an unfamiliar helmet paint-job, Niki started to drive exactly as we remember him: he made short work of Watson and Keke Rosberg, both of whom were having car troubles, and after 77 laps he was 4th. It was exactly the same position in which he'd finished in his brave come-back drive at Monza in 76, only six weeks after this horrible Nürburgring accident... Photos: Bernard Asset.

Lap by lap - Giro per giro - Runde um runde - Tour par tour - Vuelta a vuelta - Rond



PIT STOPS AND RETIREMENTS

Mansell : electrical failure on lap 1.
Jarier : involved in multiple avoidance of Mansell, caught in catch fencing.
Piquet : off road lap 4.
Villeneuve : engine failure lap 7
Cheever : stops lap 12 to check misfiring, retires lap 13 (vapour lock).
Patrese : retires lap 19 (engine failure).
Pironi : pit stop lap 24 (tyres), stops twice more laps 68 and 70 (misfiring).
Borgudd : pit stop lap 30 (accident damage).
Prost : pit stop lap 41 (puncture), loses one lap.
Warwick : accident lap 44 (damaged wheel).
Laffite : retires lap 55 (vapour lock).

ronde - Lap by lap - Giro per giro - Runde um runde - Tour par tour - Vuelta a vuelta

Kyalami statistics

SOUTH AFRICAN GP

Date: 23 January 1982
Circuit length: 4.10 kms (2.55 miles)
Race distance: 77 laps, 315.99 kms (196.35 miles)
Weather: sunny, very hot
Attendance: est 80,000

PREVIOUS WINNERS

(recent years)
1977: LAUDA (Ferrari)
1978: PETERSON (Lotus)
1979: VILLENEUVE (Ferrari)
1980: ARNOUX (Renault)
1981: REUTEMANN (Williams)

STARTING GRID

ARNOUX
Renault RE 30B
1'06"351

VILLENEUVE
Ferrari 126/C2
1'07"106

PROST
Renault RE 30B
1'08"133

ROSBERG
Williams FW 07/C
1'08"892

WATSON
McLaren MP4/B
1'09"736

LAFFITE
Talbot Ligier JS17
1'10"241

LAUDA
McLaren MP4/B
1'10"681

DE ANGELIS
Lotus 87
1'10"685

CHEEVER
Talbot Ligier JS17
1'11"005

GIACOMELLI
Alfa Romeo 179D
1'11"285

BOESEL
March 821
1'12"077

BORGUDD
Tyrrell 011
1'12"366

SERRA
Fittipaldi F8/C
1'13"467

PIQUET
Brabham BT49
1'06"625

PATRESE
Brabham BT50
1'07"398

PIRONI
Ferrari 126/C2
1'08"360

REUTEMANN
Williams FW 07/C
1'09"306

ALBORETO
Tyrrell 011
1'10"037

SALAZAR
ATS D06
1'10"624

WARWICK
Toleman 181
1'10"685

DE CESARIS
Alfa Romeo 179/D
1'10"952

MANSELL
Lotus 87
1'11"227

WINKELHOCK
ATS D06
1'11"808

MASS
March 821
1'12"100

DALY
Theodore TY/01
1'13"418

JARIER
Osella FA1/C
1'13"834

Did not qualify:

BALDI (ARROWS A4) 1'13"976
HENTON (Toleman TG181) 1'16"653
PALETTI (Osella FA/1C) 1'15"504
FABI (Toleman TG181)
GUERRERO (Ensign N179)

PROVISIONAL DRIVERS' WORLD CHAMPIONSHIP PLACES

1. Prost 9 pts - **2.** Reutemann 6 pts - **3.** Arnoux 4 pts - **4.** Lauda 3 pts - **5.** Rosberg 2 pts - **6.** Watson 1 pt.

RESULT

1.	PROST	Renault RE 30/B	77 laps in 1h32m08.40s
2.	REUTEMANN	Williams FW07/C	14.946s behind
3.	ARNOUX	Renault RE30/B	27.900s behind
4.	LAUDA	McLaren MP4/B	32.113s behind
5.	ROSBERG	Williams FW07/C	46.139s behind
6.	WATSON	McLaren MP4/B	50.992s behind
7.	ALBORETO	Tyrrell 011	76 laps
8.	DE ANGELIS	JPS Lotus 87BS	76 laps
9.	SALAZAR	ATS D06	75 laps
10.	WINKELHOCK	ATS D06	75 laps
11.	GIACOMELLI	Alfa Romeo AR 179/D	74 laps
12.	MASS	March 821	74 laps
13.	DE CESARIS	Alfa Romeo 179/D	73 laps
14.	DALY	Theodore TY/01	73 laps
15.	BOESEL	March 821	72 laps
16.	BORGUDD	Tyrrell 011	72 laps
17.	SERRA	Fittipaldi F8C	72 laps
18.	PIRONI	Ferrari 126/C2	71 laps
19.	LAFFITE	Talbot Ligier JS17	54 laps
20.	WARWICK	Toleman 181	43 laps
21.	PATRESE	Brabham BT50	18 laps
22.	CHEEVER	Talbot Ligier JS17	11 laps
23.	VILLENEUVE	Ferrari 126/C2	6 laps
24.	PIQUET	Brabham BT49	3 laps

UNTIMED PRACTICE

FRIDAY MORNING

Villeneuve	1'07"757
Prost	1'08"368
Pironi	1'08"385
Arnoux	1'08"627
Patrese	1'09"233
Laffite	1'10"668
Alboreto	1'10"704
Rosberg	1'10"849
Watson	1'11"152
De Cesaris	1'11"207
Reutemann	1'11"330
Giacomelli	1'11"483
Mansell	1'11"555
Salazar	1'11"908
Lauda	1'12"076
Winkelhock	1'12"341
Fabi	1'12"742
Cheever	1'12"790
Borgudd	1'12"924
Boesel	1'13"222
Daly	1'13"322
Mass	1'13"711
Warwick	1'13"985
De Angelis	1'14"056
Serra	1'14"230
Baldi	1'14"329
Jarier	1'15"392
Paletti	1'15"564
Henton	1'17"858

THEIR FASTEST RACE LAPS

	Time	Lap
Prost	1'08"278	49
Reutemann	1'10"526	59
Arnoux	1'09"763	3
Lauda	1'10"577	47
Rosberg	1'11"133	38
Watson	1'11"351	28
Alboreto	1'11"892	33
De Angelis	1'11"785	66
Salazar	1'13"080	40
Winkelhock	1'13"074	53
Giacomelli	1'13"593	40
Mass	1'13"657	54
De Cesaris	1'10"164	56
Daly	1'14"691	36
Boesel	1'14"380	5
Borgudd	1'13"118	25
Serra	1'12"970	4
Pironi	1'10"246	28
Laffite	1'10"631	53
Warwick	1'14"120	17
Patrese	1'10"666	16
Cheever	1'13"141	3
Villeneuve	1'10"555	3
Piquet	1'11"412	3

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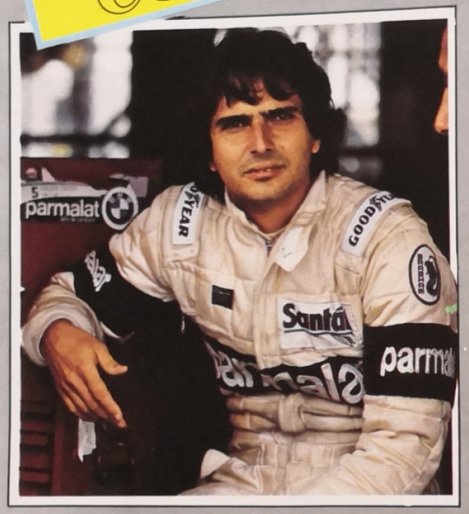
NELSON'S COLUMN



In the week before the South African GP our Parmalat Brabham-BMW BT 50s were timed along the pits straight at Kyalami at more than 320 km/h, which is just over 200 miles per hour. People were forecasting quick practice laps of under 1 m05s, which is five seconds faster than the old lap record.

Being able to do speeds like that is quite exciting until you start to think about what could happen if you lost control. If I wasn't lucky enough to have a car as strong as the Brabham, I think I would worry about that sort of thing.

Well, the best turbocar time in practice was the 1 m 06.35s which René Arnoux did to take pole position. I think that Riccardo Patrese or I might have been able to go faster than that in fact, but as you know we spet a lot of time with all our fellow drivers in a discussion about the new superlicence which FISA wants us to sign. As a result we missed the first day of practice and on the second the weather wasn't quite as good as we would have liked for fast times.

All the people at the Brabham factory in Chessington had worked very hard since our last test at Ricard in December in order to make some big changes to the specification of the three turbocars which we took to Kyalami. At the BMW Christmas party in Munich, one of their top officials told me that the Brabham was the most efficient and adaptable company which he had ever worked with. That's quite a compliment from a German company, I believe.

Maybe we have a bit more work to do on the handling of the car, though. The balance wasn't quite right for Kyalami and although we think we know what to do to correct the problem we couldn't do the work so far away from home. My estimate is that we were about a second per lap slower than we could have gone. Strangely enough, the power may have been a handicap with the car in this sort of condition, because the torque is so fantastic that we were having trouble with everything except the hardest tyres which Goodyear could give us.

Even so, I felt reasonably happy about the race because we had done hundreds of miles of running on the same BMW engine with complete reliability. On race morning in the warm-up session the only car which was as quick as Riccardo's or mine was the Ferrari of Gilles Villeneuve. Unfortunately I made a terrible start. Despite having done some practice starts to get used to the turbo engine I got away so badly that I was 14th at the end of the first lap and knew then that I'd probably have to take a few risks in order to catch up the Renaults in front.

The best place for overtaking at Kyalami is Crowthorne, the corner right at the end of the long straight where we had been doing those high speeds in practice. To make sure of getting past as many people as possible you have to use the brakes to their maximum, which is what I was doing. It was quite exciting at times and I could feel that maybe I was using them just a bit too hard, because they were pulling to the left.

I had passed two or three cars in a couple of laps and felt that I could make up lots of places fairly quickly even though the Renaults had more or less disappeared. On lap four, though, I braked just a tiny bit too late, the car tried to turnleft and I was heading for the catch fences.

Nelson Piquet

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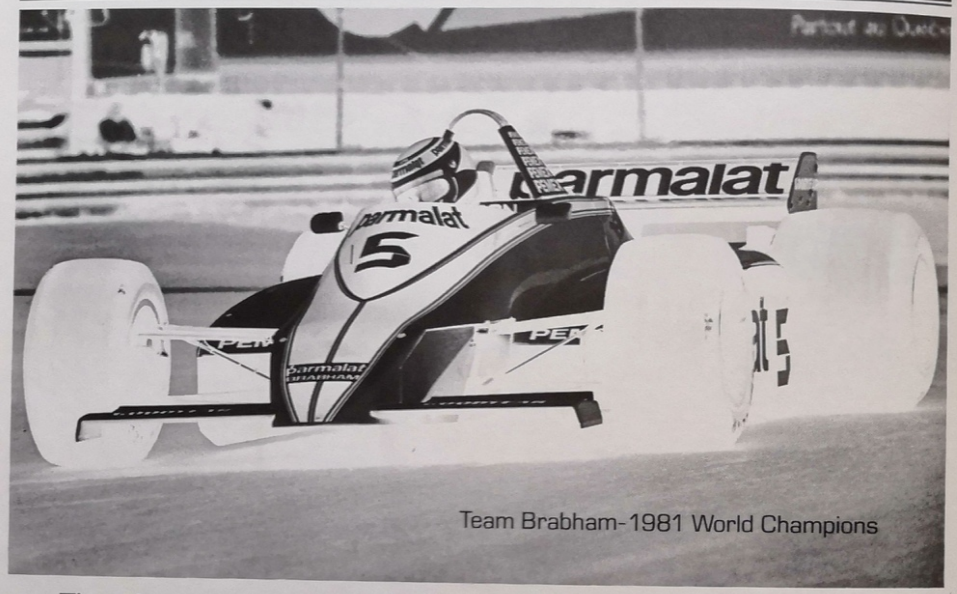

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